

JPRS 78620

28 July 1981

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2154

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EXPANSION OF BULGARIAN TRADE RELATIONS WITH YUGOSLAVIA

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 10 Jun 81 pp 8, 9

[Interview with Gencho Karageorgiev, manager of Fairs and Exhibitions Administration, by Anna Draganova]

[Text] In recent years the Bulgarian People's Republic and SFRY have been developing beneficial economic relations. An effective way to broaden the business contacts between the two countries is to organize representative exhibitions, which familiarize the general public as well as the experts with the economic possibilities of the two countries. The exhibitions facilitate the evaluation of the possibilities for new and higher forms of cooperation and its increase in different fields and branches. In 1980 Bulgaria organized a large exhibition in Macedonia, and in the fall of 1980 Serbia was our guest with an interesting exposition which opened new possibilities for production specialization and cooperation.

An initiative was begun which continued into this year: two of our largest exhibitions, which represent the Bulgarian economy abroad, were shown in Yugoslavia--from 20 to 28 April in Belgrade, and from 20 to 29 May in Zagreb. On this occasion a representative of the editorial board talked with Comrade Gencho Karageorgiev, manager of Fairs and Exhibitions Administration in the International Fairs and Exhibitions SP.

[Question] Comrade Karageorgiev, would you, for the benefit of our readers, briefly review the Bulgarian-Yugoslav economic relations during recent years, pointing out the most interesting forms of cooperation?

[Answer] The economic relations between Bulgaria and Yugoslavia show a trend toward improvement, which has been broadened and intensified in recent years. We are used to illustrating everything with figures and that is why I will point out the almost fourfold increase in exchange of commodities between the two countries. From 96 million dollars in 1976, the first year of the Seventh Five-Year Plan, it reached 361 million dollars in the last year, 1980. We expect good results from the Eighth Five-Year Plan. A good reason for this is the treaty and protocol agreed upon between the two countries, which provide for a total merchandise exchange of more than 3.1 billion dollars. Bulgaria and Yugoslavia exchange products of their machine-building, chemical, light, and metallurgic industries, with a constant increase in the areas of cooperation. The trends in the bilateral economic relations are cooperation and specialization in production, joint building of projects, financial participation in new production capacities and joint initiatives in tertiary markets. Especially

promising are the branches of energy, chemistry, ferrous and nonferrous metallurgy, and machine-building.

Instrumental for the fulfillment of the agreements between the two countries' enterprises are exchange visits by business delegations, representatives of chambers of commerce, and specialists. The Bulgarian commercial and industrial exhibitions in Belgrade and Zagreb were an expression and continuation of the joint efforts towards development of good economic cooperation between our two countries.

[Question] More than 40 percent of the total merchandise exchange between Bulgaria and Yugoslavia is with Serbia. Our exposition was supposed to reveal still unused possibilities for mutually beneficial cooperation before the business circles. Did it succeed in this respect?

[Answer] The production of 130 Bulgarian enterprises and the activity of 27 export-import organizations was demonstrated at the exhibition in Belgrade. These figures show well enough its representative nature. All sectors of our economy participated. The exhibition was at a very high level and its results are good. Business transactions were made for over 180 million dollars, mainly in the field of electronics, machine-building, metallurgy, and chemistry. Actually, these were the very structure-forming branches emphasized by the exhibition. In a well-balanced exposition we showed the achievements which Bulgaria has made in its 37-year development along the road to socialism. Naturally, the exhibition also showed other ways for the development of our economic relations--technological exchange, engineering services, building of joint projects. Effective long-term cooperation is emerging in which the delivery of complete projects will play an important role. In our exposition, there were some products which were the result of cooperative efforts by Bulgarian and Yugoslav enterprises--the combines KCC-50 and KCC-100 T, as well as some household electrical appliances. The exhibition was visited by many experts and ordinary citizens.

One of the main events in the framework of the exhibition was the round-table conference devoted to the development of multilateral economic cooperation between Bulgaria and Serbia. Representatives of the two nations talked over and discussed the perspectives of bilateral cooperation and expressed their readiness for concrete realization of the existing possibilities.

[Question] One month after the exhibition in Serbia, the Bulgarian exposition visited Croatia. The dialogue which started in Belgrade continued in Zagreb.

[Answer] As a logical continuation of our exhibition in Belgrade, our introduction in Zagreb as an economic partner will make it easier to establish lasting contacts with the other republics, such as Slovenia, Bosnia, Herzegovina and Montenegro. This is evidenced by the executed business transactions and the signed agreements, which include not only supplies but also cooperation in production. There were special days devoted to round-table talks on machine-building, chemistry and electronics in the framework of the exhibition. The experts pointed out the potentials of the two countries, facilitated by the geographic proximity and lower transportation expenses.

The engineering and other services offered by Agrokomplekt, Bulgargeomin, and Tekhnoeksport familiarized the experts with Bulgaria's experience in building complex projects and revealed possibilities for joint work in third countries.

After the presentation of Serbia's economy in Bulgaria last year, we expect in 1982 a large exhibition in Sofia from Croatia, Slovenia, Bosnia and Herzegovina and Montenegro.

The result of these two major initiatives in Bulgaria's jubilee year is that in the future and only in the future we will be able to evaluate realistically their contribution to the development of our bilateral economic relations.

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TRANSPORTATION PLAN FOR 1981 OUTLINED

Warsaw PRZEGLAD KOMUNIKACYJNY in Polish No 3, Mar 81 pp 81-86

[Article by Feliks Dasiczuk: "The Situation in Transportation"]

[Text] While speaking about the current situation in our transportation, we must, first of all, refer to the situation and economic results in 1980.

The 1980 results, appraised as unfavorable, are a result both of the conditions of previous years and of the developments during the undoubtedly difficult past year. Reports of the Main Statistical Office [GUS] furnish information about the decline in national income by 4 percent as compared with 1979 and by as much as 6 percent in comparison with 1978. The tasks of the National Socioeconomic Plan, defined by the worth of sold production, were fulfilled 98.6 percent. The shortfall amounted to 42.3 billion zlotys, the results of the second half-year accounting for it. Considering the fact that in the first half of 1980 a 45.4-billion-zloty surplus had been achieved in relation to the plan as established on the basis of the time-lapse indicator, the total production loss in the second half year due to problems with supply and coproduction, as well as strikes and other causes, is estimated at approximately 88 billion zlotys.

The annual tasks of production were not fulfilled with regard to most basic industrial products, the greatest shortfalls occurring in the production of hard coal (12 million tons) and then the production of chemical fertilizer and cement.

There was a decrease in the growth rate of foreign trade: a decrease in exports and in the volume of imports. In agriculture, mainly due to a poor grain harvest and the disastrous potato crop, the situation worsened.

Transport of Freight

These generally unfavorable economic results had a major influence on the situation in transportation and on the results of transport operations. In 1980, the socialized transport enterprises carried a total of 1,664,700,000 tons of freight, i.e., 0.3 percent less than in 1979.

The tasks of the plan for 1980 in the area of the magnitude of transport of freight were fulfilled by the entire public and industrial subbranch transportation system 96.8 percent (with the 2.9 percent increase assumed by the plan), the railroad transportation system having fulfilled 97.8 percent, pipeline transportation 95.8 percent and inland waterway shipping 83.6 percent.

The transport plans set for 1980 were not implemented, although current transport needs were generally met.

There was decreased demand for transport with regard to coal, cement and chemical fertilizer, and, in the fourth quarter, also crops.

In addition to the decreased demand for transport and the negative results of interruptions of operations, the efficiency of the operation of the transportation system was also influenced by many other unfavorable factors which imposed themselves at the time.

In connection with the delayed harvest, the structure of transport needs underwent unfavorable changes.

Transport of crops, which usually begins in September, began only in the second half of October. Independent of the deadline for crop transport being different from that in previous years, considerable difficulty was caused by the need to give such transport high priority, often contrary to the requirements of good management and organizational efficiency, as was the case with the transport of sugar, flour and edible potatoes.

At the same time, fuel allotments were introduced in all branches of transport. This had the greatest impact on motor transport.

In connection with lack of fuel in motor transport, railroads took over the transport of some of the freight. For this purpose, a waiver was obtained from the order of the minister of transportation of 5 December 1977 concerning the principle of meeting transport needs.

There was also substantial worsening in other external conditions of implementation of transport tasks.

In comparison with the past year, there was a considerable increase in the hold-over of railroad cars being loaded or unloaded and, due to reductions in work on holidays, there was a decrease in the regularity of loading and unloading.

Interruptions of work which occurred in ports and later in mines, together with termination of Sunday mining and limitation on mining on work-free Saturdays, disturbed the balance in transport services to the mining industry which had been attained through great effort at the beginning of the year despite the limited possibilities of the transportation system.

Proof of the magnitude of changes which this caused in the transport of coal is the fact that while by the end of the first quarter the transport of coal by standard-gauge railroads exceeded the plan by 1,653,000 tons and by the end of the first half-year by 2,430,000 tons, the losses occurring in the third and fourth quarters considerably exceeded the surplus which had been obtained during the first 6 months. The only cause of this breakdown was the decreased supply

of coal to the market. In the fourth quarter, Sunday loadings were 10 times less than during the first half-year, and on work-free Saturdays they decreased about 40 percent.

Coal transport by all branches of transportation was 12.4 million tons less than the plan, and in relation to the plan fulfillment in 1979, 1.8 million less.

Transport of Passengers

The joint tasks of all branches of transportation in the area of passenger transport for 1980 were implemented 98.4 percent (the plan had been 3,521,400,000 persons, the fulfillment was 3,464,200,000 persons). The incomplete implementation of the plan in the area of transport of passengers resulted from the general difficult situation in railroad transport, State Motor Transport [PKS] operations and airline operations. This was due to many causes, but especially to a marked decrease in our society's mobility in the third and fourth quarters of 1980 and limitation of vacation and tourist travel. Moreover, the incomplete fulfillment of the passenger transport plan by PKS was influenced by a drop of patronage in local passenger transportation, as well as the announced cutbacks in long-distance bus transportation (service was suspended on 52 bus lines) and abandonment of bus rental for transport of excursionists.

The unfavorable configuration of passenger transport was also influenced by the poor mechanical condition of buses caused by lack of improvement in the supply of spare parts, tires and batteries.

Repair and Production Facilities

The implementation of the planned tasks of repair and production facilities in 1980 took place under difficult conditions which had been caused at the very beginning of 1980 by incomplete deliveries of domestic and imported materials and coproduced elements, as well as by a considerable shortage of employees (lack of approximately 2,500 persons in comparison with the plan). Disturbances in the implementation of production also caused reduction in deliveries of electric energy; moreover, they caused production stoppages and periodic decreases in labor intensiveness.

As expressed in terms of value, the plan of production for 1980 was fulfilled 98.2 percent (i.e., with a shortfall of approximately 700 million zlotys), while the planned value of deliveries to market was attained with a 7.4 percent surplus. [sentence as published]

Considerable shortfall occurred particularly in repairs of diesel locomotives (-361 units, i.e., 12.2 percent), electric locomotives (-103 units, i.e., 12 percent), electric-powered units (-208, i.e., 23.1 percent) and freight cars (-12,500, i.e., 15.1 percent).

There was also a shortfall in repairs of trucks and in the production of pre-fabricated crossties.

During the entire year there was a shortage of metallurgical products, mainly rims, threaded products, coproduced spare parts and subassemblies for repairs of railroad rolling stock; of spare parts, particularly cylinder liners and pistons, for repair of motor vehicles; of cement for production of prestressed-concrete crossties; of impregnating oil for wooden crossties. Moreover, nearly all the industrial units of the Ministry of Transportation experienced difficulties related to reduced deliveries of electric energy.

The investment and construction plans of the Ministry of Transportation were not fully implemented in 1980. The outlays for these purposes were utilized approximately 82 percent, and the allotments for construction and assembly work barely 67 percent. Basic difficulties and frequent stoppages were caused by interruptions of work in construction enterprises, by bad weather conditions during the summer season and by shortages and irregular deliveries of building materials.

The effects of the year 1980, in which the irregularities of many previous years were accumulated, have had a basic influence on the assumptions and form of the plan for 1981, on the methods and process of its preparation, as well as on the principles of supervision and management of enterprises.

As a result of the current social situation and the economic conditions and problems, the main goal of all organizational units of the national economy in 1981 is envisaged to be the initiation of processes of restoring the social and economic balance and again freeing development reserves. The plan for 1981 represents the first stage of a 3-year program of social and economic stabilization of our country, and it envisages the following basic targets: reduction of investment outlays, with a simultaneous change in the structure of investments; setting imports, particularly from countries of the II payments area (capitalist countries), in accordance with our country's ability to pay; making changes in the system of distribution of scarce resources and materials for the benefit of market and export production; and shaping the principles of socioeconomic policy and of mechanisms of operation of economic units in such a way as to permit more flexible adaptation of enterprises and plants to currently existing conditions of management, better utilization of all kinds of raw materials and other materials, and assuring economic effectiveness.

In general, we can state that the basic target of the plan for 1981 is better utilization and activation of national assets (in the form of machinery, equipment, means of transportation and materials). From these general basic targets follow specific tasks and problems for solution in transportation as a whole and in the entire Ministry of Transportation.

The Targets of the Transportation Plan for 1981

The basic target of the transportation plan for 1981 is to meet the reported needs and to reduce the number of inoperative rolling stock. In rail transportation, particular emphasis is placed on the elimination of factors which limit the transport capacity of the railroads, namely: improvement in the operating condition

of railroad rolling stock and of tracks on rail lines and at stations, and also increasing the transport capacity of more important rail lines, particularly on outbound lines and at stations serving Silesia. In connection with reductions in deliveries of new rolling stock, drastic fuel conservation, and lack of improvement in supplying the PKS with spare parts and tires, particular attention is centered on improving the efficiency of transport, on closer cooperation with shippers and customers, and on better utilization of the worktime of personnel and motor vehicles.

The volume of transport by individual branches of transportation for 1981 was envisaged under conditions of great uncertainty as to the level of industrial and farm production. Proof of this is furnished by reports of direct manufacturers concerning transport needs in the first quarter, which show tendencies of a marked decline in the demand for transport services.

If such a tendency persists in the subsequent quarters, note should be taken of the fact that real transport volume for 1981 will be much lower than those previously envisaged. The transport volumes envisaged for Polish State Railroads (PKP), and inland waterway shipping, are not directive-type volumes and are regarded as tentative and established with a large safety margin¹. the event that better economic results be attained than would follow from current forecasts.

The transport volumes envisaged for individual branches of transportation for 1981 look as follows:

(2) Rodzaj transportu	(1) (Mys. ton)				
	(3) Wykonanie 1979	(4) Wykonanie 1980	(5) Wysokość potencjalna 1981	%	%
6 Koleje normalnotorowe	479 000	472 000	480 000	98.1	102.3
7 Koleje wąskotorowe	1 000	1 000	1 000	100.0	100.0
8 PKS (kraj)	229 000	229 000	229 000	100.0	100.0
9 Zegluga wodna	19 000	19 000	20 000	116.0	122.7

Key:

1. [thousands of tons]
2. Type of transportation
3. 1979 [plan] fulfillment
4. 1980 [plan] fulfillment
5. Preliminary targets for 1981
6. Standard-gauge railroads
7. Narrow-gauge railroads
8. PKS (domestic)
9. Inland waterway shipping

Taking into account the comprehensive economic priorities, particular attention in 1981 is given to transport of liquid fuels and coal, goods for supplying the population, and to transport services to agriculture and to foreign trade enterprises.

Coal transport (despite decreased volume) will be basically important, as in previous years. The volume of coal production, as envisaged in the plan for 1981, is 181 million tons, from which follows the need to transport approximately 185.7 million tons of coal.

In comparison with 1980, these are decreased amounts. They will be subject to further reductions depending on the final volume of coal production that is accepted by the mining enterprises.

The second basic problem of transportation will be organization of efficient transport service to agriculture, including the entire branch of farm and food products processing industry. As distinguished from coal transport, this is mainly motor transport.

A very important problem, and one which we will be able to solve mainly through skillful coordination of transportation services, remains their economically efficient utilization. Wherever it is possible to utilize rail service we should, for economy reasons, avoid using motor transport.

It has been assumed that 3,460,200,000 passengers will be carried in 1981, which means that transport will be maintained at the level of the 1980 plan fulfillment.

A basic problem is to achieve improvement in the quality of rendered transport services. In motor transport, still of timely importance is the need to intensify the utilization of busses, rolling stock, giving priority to transport of workers at reduced monthly rates instead of conventional transport, to have better coordination of PKP and PKS schedules and to improve the regularity and punctuality of bus runs. In rail transport, it is necessary to give particular attention to the regularity and punctuality of operation of trains, particularly express trains, to adapt--with the available means--the ratio of through trains and cars to streams of passengers in domestic and international transportation and to improve the efficiency of domestic rail and bus transportation. A more rapid solution is also needed for the problem of improving the system of information for travelers, improving the efficiency of advance sales of coach, reserved seat, berth and sleeping compartment tickets, improving the food service on trains and at stations with simultaneous improvement in the quality of services, maintaining cleanliness in cars at stations and in railroad buildings.

We should also emphasize new conditions which are related to the introduction of additional work-free days.

Providing efficient transport service to our country under the conditions of a shortened work week creates a new situation in the ratio between transportation and the national economy. Possible further restrictions on loading and unloading of goods on Saturdays, with a simultaneous decrease in the present volume of unloading operations on Sundays, can increase the demand for transport services on the remaining days of the week by as much as 10 to 20 percent.

Considering the fact that investments in transportation which will be made in the next few years will not enable us to obtain the needed reserves corresponding to increased variations in demand, we should initiate parallel actions with the aim of increasing to a maximum the loading of cars on workdays and introducing the obligation of performing on off days all the operations which are related to loading and unloading, if a plant has a continuous work schedule. The conditions for transport services to these plants should be defined in agreements concluded between the carrier and the plant which is being serviced. In remaining plants it would be advisable to introduce the obligation to unload railroad cars, while simultaneously providing for an appropriate fund to pay for unloading operations on work-free days. Appropriate proposals in this area have been made within the scope of discussion and consultation with regard to increasing the number of work-free days. The problem of efficient organization of the operating service of transportation (taking into consideration the work-free Saturdays) must be the subject of constant detailed analysis of transport units during the entire year 1981. The basic task of the operating services of PKP in 1981 is better utilization of the present rolling stock, attainment of a shortened turnaround time for freight cars and an increase in their statistical loading. Another important task is decreasing the number of inoperative freight cars. A basic condition for increasing the transport capacity and safety of railroad operations is the condition of the tracks. In the plan for 1981, roadbed repairs are envisaged on 2,500 km of continuous replacement of rails, 923.8 km of secondary rail replacement, and 3.8 million units of replacement of crossties. Replacing and supplementing railroad ballast will amount to approximately 2.6 million cubic meters.

The targets for 1981 envisage that transports by the PKS will remain at the level of the 1980 plan fulfillment. The accepted target is a result of an initial identification of the transport needs of PKS customers as well as of the production plans of suppliers for PKS enterprises, particularly in the area of supply of means of transportation, materials and repair services. Thus:

- the machinery industry reports continually increasing difficulties with the supply of motor vehicles and spare parts for these;
- the chemical industry does not foresee for 1981 any improvement in the supply of tires (especially as regards deliveries of inner tubes and fenders);
- the technical facilities for motorized transportation report continually increasing difficulties in performing repairs of entire vehicles due to the insufficient supply of spare parts;
- the construction industry has reduced its demand for PKS transport services in connection with the announced reduction in investment activities in 1981.

The principal task of inland waterway shipping in 1981 will be transport of coal from Silesia for domestic customers and for export, transport of ore and raw materials for fertilizer on return trips from seaports, and transport of aggregates for the construction industry's needs.

While implementing the transport tasks, the shipping industry should strive to meet the needs of shippers and customers, and customers who make direct use of waterway transport, both in domestic and foreign trade turnover.

In order to properly utilize the existing fleet, it will be necessary to further increase the efficiency of cooperation with the railroads; to provide for efficient service to barges in seaports through wider application of the method of loading ore from separate storage yards; to provide for rapid, corresponding to the targeted technology, service to barges in transport of cement; and to provide for continuous and failure-free operation of equipment which delivers construction aggregates to be shipped by barges.

Transport of passengers by air in 1981 will be at a somewhat higher level (70,000 persons) than in 1980, and will total approximately 1.9 million persons, of which 0.8 million will be in domestic and 1.1 million in international transportation. It is anticipated that transport of passengers on international routes will increase by 80,000 persons as compared with the 1980 plan fulfillment, while those on domestic routes will decrease by 10,000 persons. The reason for the decrease in passenger transport on domestic routes is the anticipated closing of four airports: (in Krakow, Bydgoszcz, Szczecin and Koszalin) for the period of the peak summer transport season in connection with periodical repair work.

The total plan of outlays for the maintenance of state and local roads in 1981 has been set at 21.3 billion zlotys, including 5.8 billion zlotys for major repairs to state roads. The planned funds will enable us to perform major repairs on 3,000 km of these roads, including 500 km of road improvement.

This will not substantially improve the condition of the road system, but will make it possible to maintain the roads in their present state, preventing their further depreciation.

In the implementation of tasks for 1981, a particularly important problem is to provide for meeting the needs for repairs of railroad and motor rolling stock. Despite the envisaged further elimination of new production (as, for example, building of freight cars) and a decrease in the production of car undercarriage trucks, there are still considerable difficulties in balancing the repair needs. Under conditions of limited opportunity to recruit labor force and to obtain delivery of materials, particularly spare parts from domestic industry and from imports, it is necessary, first of all, to create conditions and possibilities for rolling stock repairs through better utilization of the existing repair potential. For this purpose it would be advisable to take full advantage of opportunities for incentive action which have been created by Resolution No 118/80 of the Council of Ministers; the concern here is particularly for appropriate production standards as well as guidelines for controlling the amount of the wage fund.

In the area of foreign trade, the most important task is, first of all, to provide for directive-type tasks pertaining to goods exports to II payments area [capitalist countries]. This requires earmarking for exports only the best quality production and maintaining continuous consultation and cooperation with appropriate centers of foreign trade.

Import allotments for 1980 are maximum amounts. In no case can the amount of allotments for investment imports be exceeded, nor can the remaining funds from general import allotments be earmarked for this purpose. Priority in utilizing foreign-exchange allotments for imports is given to purchases of spare parts for previously ordered equipment and to purchases which are necessary for the implementation of export tasks.

The problem of investments in the Ministry of Transportation requires a separate discussion. The approved outlays for its investments are 21.7 percent lower in relation to 1979 plan fulfillment, and 11.0 percent lower when compared with 1980 plan fulfillment.

The approved outlays were used mainly for the implementation of investments which had been selected on the assumption of reorganizing the narrowed investment program and implementing first those tasks which could at least partially eliminate or alleviate difficulties in the work of transportation and of its technical facilities.

In connection with the above, after establishing other tasks whose implementation was to be halted or reduced, we used the approved outlays mainly for the implementation of: an expanded program of railroad electrification of sections of rail lines (new lines or second track) providing for the attainment of the needed transport capacity of main rail routes, outbound routes, and also systems and equipment which will provide the currently indispensable transport capacity in the area of Silesia; modernization (within the limits of performance possibilities) of service-and-repair facilities installations in all branches of transportation, with particular consideration of rail transport and of small modernization projects aimed at improving the condition of social facilities, conditions of work safety and hygiene and health service--in accordance with the most urgent needs mentioned in the demands of the work forces.

Approximately 900 million zlotys were earmarked for the implementation of small modernization investments.

The planned results of housing construction will amount to approximately 300,000 square meters of surface, i.e., will remain at the level of the revised plan of this construction in 1980 and will be 160,000 square meters more in relation to the plan fulfillment in 1979.

In connection with the large scope of continued investments, 11 projects will be halted, with a total cost-estimate value of over 1 billion zlotys, including 7 items pertaining to sections of superhighways or expressways, 13 other investment projects, mainly sections of a second track or second lane, including both rail routes and city beltways, and 2 administrative and production buildings (in Zamosc for the LHS [Steel Sulphur Line?] and in Wroclaw for the Association of Road Quarries).

Moreover, considerable reductions have been made in several tens of construction projects through introducing, among other things, their implementation by stages.

The railroad electrification program calls for electrification of a total of 397 km of rail lines, including, however, a 103 km carryover from the 1980 plan overfulfillment.

It has been assumed that within the scope of purchases of finished capital goods the investors can make purchases or place orders strictly within the limits of outlays which have been approved for this purpose. All orders with delivery deadlines in 1981 which do not fit within the approved outlays should be canceled or else the deadlines for their implementation should be moved to later years.

Under the conditions of obligatory general reductions in investments for 1981, additional opportunities have been simultaneously introduced for initiation of small investment projects, particularly those which assure improvement of exceptionally difficult work conditions and of those of occupational safety and hygiene, with a unit cost-estimate value of up to 5 million slotys, with a completion deadline before the end of 1981. These investment projects can be initiated at the suggestion of the work forces and implemented through the economic system, with the utilization of available construction materials and financial resources. Deserving attention next are the problems of new principles of planning and of management of enterprises in 1981. These are defined in Resolution No 118 of 17 November 1980 concerning changes in the system of management of state enterprises in 1981.

The resolution concerns all the socialized enterprises, except small business enterprises, since the currently binding principles of operation of the latter are more advantageous to them.

The intent of the resolution is to preserve the direct influence of the central echelon on implementation by enterprises of the key economic tasks which concern: production of basic raw materials and other materials for exports, market deliveries and main investment projects; implementation of production plans and elimination of the hitherto main area of conflict with work forces arising from the size of hitherto imposed tasks for whose fulfillment the higher units could not guarantee a supply of materials and technology; increase in the prerogatives of enterprises, simplification of the system of administration which would make the work forces aware of the relationship between their production effort and their earnings as well as improvement in their social conditions; creation of opportunities for work forces which are interested in increasing production and decreasing its cost, i.e., improving the efficiency of management; assuring protection of the level of earnings which has been attained under conditions of necessary structural changes and of the level of production which will characterize some of the enterprises in 1981.

The enterprises, on the basis of directive-type tasks and funds for their implementation as well as information guidelines from the Ministry of Transportation have prepared a socioeconomic plan for 1981. The directive-type tasks for 1981 concern:

--the volume of production of some items, and the value of export deliveries in foreign-exchange zlotys; in transactions with countries which have been included in I payments area (socialist countries), tasks which follow from the currently implemented plan (exports and imports) after the signing of yearly protocols and other mandatory instructions; in transactions with countries of II payments area (capitalist countries), total export tasks which are treated as minimum amounts as well as those which are treated as maximum amounts, and--within the framework of import allotments--the value of investment deliveries as maximum amounts;

--the export balances of the construction industry, and payments for services;

--material tasks, performed during the implementation of investment projects which consist in investment construction, in conformity with concluded agreements.

Allocations of funds to associations pertain to:

--allotments of materials and technology; allotments of funds for investment construction and purchase of capital goods and also the principles governing the growth of the wage fund.

Moreover, the amounts of tentative indicators which were the base of instructions as to targets and resources, have been furnished to directly concerned units.

The main goals of our activity in 1981 should be the following:

--attainment (with reduced worktime as a result of an increase in the number of work-free days) of a maximum possible level of production and services, and implementation of other material-type tasks;

--maximum possible increase in production and services for the needs of the domestic market and of exports;

--as efficient and effective as possible utilization of energy, raw materials, and other materials, especially imported ores, and a decrease in the cost of production and services;

--a marked reduction in the scope of investments by halting the implementation of some investments and by utilizing accumulated machinery and equipment.

In addition to these key tasks and the allotment of funds for their implementation, the remaining tasks are set by the enterprises themselves, depending on the availability of supplies or energy. According to Resolution No. 118/8 of the Council of Ministers, the relationship between the volume of production and the wage fund is to be the incentive for maximum performance of tasks. It should be emphasized, however, that this principle--so evident under the operating conditions of industrial enterprises--cannot be applied fully to all the transportation enterprises. The problem is that an analysis of the possibilities of using standards which characterize transport production has shown a lack of

correlation between the configuration of these standards and the wage fund. This applies particularly to rail transportation. In this connection, there arose a need to apply different principles of establishing the wage fund for at least some of the public transportation enterprises, and positively so for the PKP enterprise. The wage fund for the latter was established on the basis of the 1981 employment average plus the number of employed persons which had been cleared with the Planning Commission of the Council of Ministers, while the average 1980 wage was augmented by the average 1981 wage increase. This proposal was cleared by the Planning Commission of the Council of Ministers. This means that the number of employees and the amount of the wage fund for the PKP for 1981 have been established by the central authorities.

Problems in the area of proper selection of standards of operation and definition of the principles of planning are also occurring in other transportation units, e.g., in Polish State Airlines [LOT], as well as in units of the technical facilities of the transportation system, e.g., in Railroad Rolling Stock Repair Plants [ZNTK].

The problem of planning the wage fund implies more complex problems which are related to the operating principles of public utility organizations, which transportation units are, under the conditions of general economic reform. Due to their objective technical and economic characteristics and their strategic importance for the normal functioning of our economy and our society, transportation organizations should undoubtedly be subject to a different and much stricter type of regulation than is the case with industrial or construction-and-assembly enterprises. The specific characteristics of transportation operations require the preparation of a separate, comprehensive project of economic reform in transportation.

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CSO: 2600/221

LAW ON 1981-85 5-YEAR PLAN PUBLISHED

AU071250 Bucharest SCINTEIA in Romanian 2 Jul 81 pp 3,4

["Law on the Adoption of the National Uniform Plan of Socioeconomic Development in Romania for the 1981-85 Period"]

(Text) The Grand National Assembly of the Socialist Republic of Romania adopts the present law.

Article 1--The national uniform plan for Romania's socioeconomic development in the 1981-85 period, established in accordance with the directives of the 12th RCP Congress, is adopted.

The major indexes of the socioeconomic development of the Socialist Republic of Romania are the following:

<u>Index</u>	<u>Percentages calculated on the basis of 1980 prices</u>	
	<u>1985 provisions compared with 1980's</u>	<u>1981-1985 average annual rate</u>
1. Social product	134.3	6.1
2. National income	141.1	7.1
3. Net industrial production	152.4	8.8
4. Industrial goods production	144	7.6
5. Overall agricultural production (average annual rate for the 1981-85 period compared with 1976-80)	124.4 - 127.4	4.5 - 5
6. Total investments in the economy (for the 1981-85 period compared with 1976-80)	128.8	5.2
7. Foreign trade volume (for 1981-85 compared with 1976-80)--in 1981 plan prices	175.5	11.9
8. Number of personnel	107.9	1.5
9. Labor productivity (calculated on the basis of net production): --in industry	140.4	7
--in construction-assembly	130.1	5.4

[continued]

10. Reduced costs per 1,000 lei production-goods in national industry--percent	8.2	
11. People's real incomes	119	3.5
12. Average real remuneration	115.5	2.9
13. Peasantry's real incomes from work in agricultural production cooperatives and private farming, per active person	118	3.4
14. Retail goods sales	126.6	4.8
15. Public services	176	12

The basic objective of the 1981-85 5-year plan is to continue implementing the provisions of the RCP program on building the comprehensively developed socialist society and Romania's advance toward communism, to promote Romanian society to a new and superior stage of development, in which modern science and technology will be applied in all areas; extensive development will be replaced by intensive development on the basis of the quantitative accumulations of previous 5-year plans; a profound agricultural revolution will be achieved; the people's level of well-being and civilization will be raised, and socialist Romania's independence and sovereignty will be strengthened.

I. Industrial Production Development

Article 2--The 1981-85 5-year plan will ensure the continuation of the industrialization policy at a higher level--as a decisive factor for building a modern and highly efficient economy and for better utilizing the entire material and human potential of our society. Steps will be taken to rapidly develop key industrial branches and to raise the technical level of all industrial sectors. At the same time, the process of industrial restructuring will be intensified, and emphasis will be placed on sectors which require less energy and raw materials.

The net industrial production--in terms of 1980 stable prices--will increase at an average annual rate of 8.8 percent, while the goods-production will increase 7.6 percent.

Industrial production in the major branches will increase as follows:

	Percentages calculated on the basis of 1980 stable prices	
	1985 provisions compared with 1980	1981-1985 average annual rate
Extractive industry	133.5	6
Metallurgical industry	144.7	7.7
Machine-building industry and metal processing	152.5	8.8
Chemical and oil processing industry, construction materials industry, wood, cellulose and paper exploitation and processing	132.6	5.8
Light industry	143.8	7.5

Article 3--In the 1981-85 5-year plan the production of principle industrial products will come to the following levels:

[AU071320]

<u>Item</u>	<u>Unit of measurement</u>	<u>1985 levels</u>	<u>1985 compared to 1980--percent</u>
Electrical power	bill. kWh	82.5	122.3
Net coal	mill. tons	85.6	243.2
Bituminous shale	mill. tons	10	--
Extracted oil	mill. tons	12.5	106.6
Extracted methane gas	bill. cubic meters	31	100.3
Steel	mill. tons	18.2	138.4
Industrial technological machinery and equipment	thou. tons	1,027	132.5
Ocean-going vessels	thou. dwt	1,485	309.5
Passenger vehicles	thou. units	312	391.5
Means of automation and computers	bill. lei	18.8	192
Products of fine mechanics, optics, hydraulic and pneumatic equipment and elements	bill. lei	21	267
Metal-cutting machine-tools	bill. lei	17.5	223
Basic macromolecular products	thou. tons	1,180	203
Synthetic rubber	thou. tons	313	208.3
Plastic material products	thou. tons	654	201.5
Tires	thou. units	9,610	192.1
Artificial and synthetic fibers and yarns	thou. tons	452	219.8
Chemical fertilizer (100 percent active substance)	thou. tons	4,050	165.6
Pharmaceuticals for human use	bill. lei	10.6	300.5
Cement	mill. tons	16.5	105.7
Wooden furniture	bill. lei	22.9	162
Household electrical appliances	bill. lei	4.8	194
Textiles	mill. square meters	1,518	124.5
Knitwear	mill. units	411	134.6
Clothes	bill. lei	50	153.5
Footwear	mill. pairs	134.3	117

Article 4--Geological research will be intensified in the extractive industry, with a view to finding and utilizing new minerals and energy resources required to meet the needs of the national economy; measures will be taken to increase the efficiency of prospecting and geological exploration and to shorten the period between research and production of new resources. Special attention will be given to geological efforts to find and tap new oil and gas resources, by investigating structures at great depth, accelerating prospecting on the continental shelf of the Black Sea, and raising the recovery index of deposits.

Steps will be taken to utilize potential resources, also those at great depth or with lower useful content; the supplementary expense involved will be mostly compensated for by improving extraction and preparation technologies for minerals.

Article 5--The energy sector will be developed by expanding the network of hydro-power stations, utilizing solid fuels, beginning implementation of the program on building nuclear power stations, and tapping new energy resources such as thermal waters, wind and solar energy, biogas, biomass, and by cutting down on hydrocarbons consumption. The production of thermal and electrical energy will be expanded by developing industrial and urban thermopower stations; measures will be adopted to exploit power stations to capacity, to fully utilize fuel energy potential, and to reduce technological consumption at power stations and losses in energy conveyance.

Article 6--The metallurgical industry will place special stress on developing the industry of special, alloyed and low-alloy steels, with a view to entirely meeting all requirements in the machine-building industry, particularly in its key sectors, from internal resources.

Domestically-produced coal will be utilized to a greater extent for coking purposes.

The ferrous metals industry will be geared toward raising the degree of metal processing by rapidly increasing the production of cold-rolled, electrical-engineering, tinned, stainless steel and heat-resisting sheet and strip, metal bands, steel forged bars and blanks, and drilling and extraction tubing.

Article 7--The machine-building industry will concentrate on maximum utilization of machinery, equipment and facilities; improved production structure; high-performance and quality products; rapid development of electronics and microelectronics, means of automation and automatic production control, machine-tools, fine mechanics, optics and hydraulic and pneumatic equipment. Production lines will be organized to manufacture various spare parts and subassemblies for passenger vehicles, trucks, tractors and other machines and equipment, which are now in short supply.

The machinebuilding industry will produce 80-85 percent of the equipment and installations required to carry out the investment program of the 5-year plan and to double exports.

[AU071321] Article 8--The primary task in the chemical and petrochemical industry is to increase the degree of processing of oil and methane gas, to manufacture improved products from plastics and chemical fibers and yarns, to develop the fine chemical industry, manufacture special materials for electronics and other sophisticated sectors. Special stress will be put on devising new technologies which make better use of raw materials, require less material consumption and yield high-quality products. The production of the inorganic chemical industry will increase on the basis of better processing of various domestic resources; the production of pharmaceuticals, dyes, detergents, cosmetics and scents will be developed; in accordance with agricultural requirements, the chemical

fertilizer industry will endeavor to attain an appropriate ratio between nitrogen-phosphorus-potash base fertilizers; the production of pesticides will increase and will be geared toward high-efficiency and nonpersistent varieties.

Article 9--Construction materials production will satisfy the requirements of the investment program and consumer demand; it will endeavor to cut down energy consumption by expanding dry cement processing and manufacturing cement varieties with thermopower station ash and slag additives. The production of masonry materials will substantially increase the utilization of volcanic tufa, soft limestone and other inexpensive resources.

The timber exploitation and processing industry will develop particularly through an increased degree of wood processing; stress will be laid on increasing and diversifying the production of furniture and other finished wood products, especially varieties with a high degree of processing that can compete in international markets.

Article 10--Light industry will be channeled toward better utilization of domestic raw materials and chemical resources. Special emphasis will be put on increasing the quality of textiles and footwear, garments and knitwear, with a view to meeting consumer requirements and competing in foreign markets, thus increasing export profitability and efficiency. Similarly, the production of household appliances and glassware will have to meet domestic demand and increase exports.

Article 11--Small-scale industry will be developed within units of the people's councils and cooperative organizations--agricultural, artisans' and consumer cooperatives--and will be geared to processing local raw materials, agricultural produce and industrial byproducts, and to cooperation with national industry.

Article 12--All branches will endeavor to substantially increase the technical and qualitative level of products. Measures will be taken to improve domestic standards and norms in accordance with the need to standardize products, machinery, installations and technologies, and with modern technological progress.

Enterprises will be supplied with testing benches and control and measurement instruments, and will tighten technical control at all the stages of manufacturing processes so as to ensure high performance.

II. Agricultural and Food Industry Development

Article 13--In the 1981-85 period the process of intensive development and modernization of agriculture will be accentuated through the application of the most recent achievements in agricultural and zootechnical sciences, and through economic-organizational improvements at all agricultural units designed to ensure increases in vegetable and animal production and thus meeting domestic consumer needs and permitting a surplus for export.

The overall agricultural production will increase at an average annual rate of 4.5-5 percent more than in the 1976-80 period; the food industry will develop at an average annual rate of 7.7 percent.

By 1985 the following production figures will be attained for major agricultural and food industry products:

<u>Product</u>	<u>Unit of measurement</u>	<u>1985 levels</u>
Grain crops	thou. tons	28,500
Sugarbeet	thou. tons	12,600
Sunflower and rape	thou. tons	1,260
Soybean	thou. tons	966
Fall potatoes	thou. tons	6,700
Field vegetables	thou. tons	6,000
Fruit	thou. tons	3,600
Grapes	thou. tons	2,430
Meat on the hoof	thou. tons	4,000
Cow milk	thou. hectoliters	86,700
Wool	tons	64,200
Eggs	thou. units	8,620
Fish	thou. tons	480
Edible oil	thou. tons	620
Refined sugar	thou. tons	1,200

Article 14--The area of land under crops will total at least 10 million hectares by 1985.

In order to develop the vegetable production, measures will be taken to rationally utilize available land, to ensure high-quality seed and seedlings and to perform agricultural operations at the optimum time and by the method best-suited to each crop.

[AU071322] Article 15--In the livestock sector, the following figures will be attained by the end of 1985:

<u>Item</u>	<u>Unit of measurement</u>	<u>1985 levels</u>
Cattle	thou. head	7,300
of which:		
--cows and heifers	thou. head	3,700
Pigs	thou. head	15,000
Sheep and goats	thou. head	21,500
Egg-laying hens	thou. head	63,300

In order to increase the number of livestock and animal production, measures will be taken to improve breeding and breed selection, to develop zootechnical complexes and to increase fodder production.

Article 16--The material-technical basis of agriculture will develop by expanding supplies of tractors, combines and other agricultural machinery and equipment; irrigated land areas will expand to 2.9 million hectares; 11.64 million tons chemical fertilizer and 290,000 tons pesticide in active substance will be delivered to the agricultural sector throughout the 5-year plan.

Article 17--Measures will be taken to further improve the uniform organization, leadership and planning of agriculture and to increase individual vegetable and animal production.

III. Forestry, Water Management and Environmental Protection

Article 18--In the forestry sector, measures will be taken to harmoniously blend economic functions and environmental protection.

In the 1981-85 period an annual average volume of timber of 21.9 million cubic meters will be used for economic purposes, derived from primary and secondary sources; an additional volume of 1.8 million cubic meters of wood material will be derived from forest hygiene operations, clearing and thinning.

Article 19--In order to regenerate the forestry stock, steps will be taken in 1981-85 to:

- a) perform reforestation, integral afforestation and natural regeneration operations on a total area of 277,000 hectares; stress will be placed on promoting valuable domestic species and fast-growing species which produce maximum yields per hectare; special trees will be planted for pulp wood;
- b) strictly limit the use of forest land for other purposes, and to apply legal provisions on reclaiming such land as quickly as possible for forestry use;
- c) strictly implement legal provisions on felling age and diameter specifications for mature forests, according to species, growing conditions and production class; wind-felled trees should be used first;
- d) develop and diversify hunting and fishing in mountain streams, within specialized units; expand the cultivation of fruit bushes; intensify the harvesting and utilization of forest fruit, medicinal plants and other wild flora byproducts.

Article 20--New multipurpose reservoirs totaling 2.73 million cubic meters will be built in the 1981-85 period with a view to ensuring water supplies for populated centers, new production capacities, electrical energy and irrigation, and for flood-prevention; in order to protect populated centers and agricultural land against floods, new dams will be built and existing dams will be heightened on a stretch of 1,430 km; water course regulation and riverbed calibration operations will be performed on a stretch of 2,030 km, including shore consolidation and protection.

Measures will be taken to rationally utilize water resources, especially in industry, irrigation, electrical power production, navigation and fishing; to increase the degree of industrial water recycling and to reduce losses to a minimum; to purify waste water and to utilize water purification installations to full capacity.

Article 21--Measures will be taken in the area of environmental protection to strictly observe acceptable limits for processes generating noxious substances, to recover residual elements, to build water and air purification installations, to prevent land erosion, to protect fauna, forests and reservation flora, to preserve parks and recreation areas, and to employ nonpolluting means of transportation.

IV. Transportation and Telecommunications

Article 22--The 1981-85 5-year plan must ensure the development and optimization of transportation with a view to permitting smooth economic flows and accelerating goods turnover, by expanding primarily railroad, maritime and river transportation and cutting down auto transportation, thus saving as much fuel and energy as possible and efficiently utilizing the fleet of means of transportation.

The overall volume of goods conveyed on public means of transportation will increase in the 1981-85 period at an average annual rate of 1.9 percent.

Article 23--In the 1981-85 period the material basis of transports will increase through the addition of 360 diesel and electric engines, 10,200 freight cars averaging 4 axles, motor vehicles and auto trailers with a capacity of 611,000 tons, nonself-propelled river vessels with a total capacity of 733,000 tons, river tug and pushboats totaling 204,000 HP. The capacity of the maritime fleet will total 5.5 million dwt by 1985.

Article 24--The volume of post and telecommunication activities will be 35.5 percent higher in 1985 than in 1980 as a result of the intensive utilization of existing capacities and development of the telephone-telegraph sector, the further development of automatic urban telephone exchanges, the modernization of the technical-material base and the expansion of the radio and television networks.

[AU081540] V. Investment--Construction

Article 25--In the 1981-85 period the overall investment volume in the national economy will be 1,200 billion lei and will be used primarily to finish projects begun before 1981, to develop and update existing capacities, to supply units with additional machinery and equipment, to eliminate bottlenecks and to implement the housing program.

The following investment funds will be allocated to the major branches of the national economy:

<u>Branch</u>	<u>billion lei</u> <u>1981-85</u>
Industry	642
Construction	38
Agriculture, forestry, water management	155
Transports and telecommunications	113
Trade, public catering, tourism, technical-material supply, scientific research and technological development	34
Education, culture, health	20
Housing (including bachelor hostels)	100
Communal administration	29

Article 26--In order to carry out the planned investment projects, measures will be taken to:

- a) commission on schedule the projects featured on investment lists, provide technical-economic documentation and building plans, carry out steady work on building sites, expand the mechanization and industrialization of construction operations and modern building technologies, deliver equipment in accordance with assembly schedules, intensify cooperation between the project and user and design, construction-assembly and equipment supply units;
- b) strictly observe schedules for attaining planned parameters, perform dry and test runs as envisaged in plans, duly train manpower and exploit the projects commissioned in normal conditions;
- c) carry out investment projects on the basis of standard technologies and blue-prints, continuously reduce consumption of metal, cement and other energy-intensive products, and widely utilize local and recoverable materials.

VI. Scientific Research, Technological Development and Technical Progress

Article 27--Scientific research, technological development and application of technical progress will be primarily channeled toward the following objectives:

- a) more marked development of the raw materials and fuel basis, updating the extraction of useful elements capable of high productivity and involving low costs, reducing the amount of added fuel at thermopower stations powered by coal and expanding the network of microhydropower stations;
- b) utilizing new energy resources--thermal waters, wind and solar energy, biomass, biogas and so forth--synthetic fuels and all recoverable energy resources; reducing specific consumptions of energy and fuel in all sectors; designing specific materials and equipment to work with the new energy and fuel resources;
- c) designing and expanding utilization of highly productive modern technologies capable of increasing the degree of utilization and updating of production; improving existing technologies with a view to reducing material consumption and raising the productivity of machinery, equipment and installations; devising methods to reclaim reusable materials recovered from production and consumer processes;
- d) designing new products requiring low fuel and raw material consumption, materials for electronics, nuclear energy, aviation and other branches, as well as new, improved types of machinery, equipment, apparatus and installations capable of higher productivity and viability, requiring less energy and weighing less, capable of high technical-economic performance and with a higher degree of functionality;
- e) increasing the contribution of scientific research and technical engineering to scientifically organizing and programming production, to optimizing maintenance and repair operations for machines, equipment and installations, to expanding production mechanization and automation, and increasing labor productivity and economic efficiency in all areas;

f) applying the results of scientific and technological research and zootechnical practice within the context of the new agricultural revolution, expanding genetic engineering with a view to creating new, highly-productive cross species, utilizing biomass through biological systems to obtain nutritive products, petrochemical products and fuel, and expanding biosenergy crops.

Article 28--Some 3,000 major projects for scientific research and technological development will be dealt with in the 1981-85 period, of which 2,600 will be concluded and applied in practice by the end of the 5-year plan; 770 new technologies will be applied, of which over 98 percent will be of domestic design, and the utilization of 180 modern technologies will be expanded; and new products and materials will be put into production, so that 45 percent of the production goods in the processing branches of national industry should be achieved on the basis of new and updated products by 1985.

[AV081526] VII. Technical-Material Supplies

Article 29--In the 1981-85 5-year plan more of the material basis of the ~~plan~~ will be supplied from domestic resources, which will have to be rationally and efficiently managed. For this purpose, steps will be taken to:

- a) extensively utilize internally-produced raw and other materials;
- b) establish the materials necessary on the basis of technical substantiated norms and regulations, strictly observe plan-approved consumptions, manufacture valuable products requiring the least possible energy and raw materials;
- c) rationally allocate stocks of raw and other materials, fuel and semi-finished products, and rapidly recirculate stockpiled material resources;
- d) implement programs on cooperation among enterprises, central's and counties;
- e) expand product standardization, reduce to the absolute minimum the number of types and dimensions of materials, sub-assemblies, machines, installations and equipment, as well as types of production lines and industrial and civil construction built in the country, in accordance with the law;
- f) organize collection and utilization of reusable and recoverable materials envisaged--iron and pig iron, alloyed steel and ferro-alloys, nickel, copper, aluminum and other nonferrous metals, chemical products, mineral oils, rubber, plastics, timber, paper, textiles, leather, glass, mineral deposits, metallurgical slag, thermopower station ash, agricultural and food by-products, and materials from other branches;
- g) collect and completely utilize used products; using them as such or reconditioning recoverable materials and parts, elements, sub-assemblies, component equipment and aggregates.

VIII. Foreign Trade and International Economic Cooperation

Article 30--Foreign trade activities will be aimed at achieving a surplus commercial balance which should permit an even balance of payments, reducing our foreign debt and consolidating the country's currency reserves.

In the 1981-85 period the total volume of foreign trade--in terms of 1981 plan prices--will be 75.5 percent higher than in the 1976-80 period, while the volume of currency returns from international tourism will be 68 percent higher.

Article 31--In order to increase exports and their efficiency, steps will be taken to:

- a) intensify foreign market canvassing and conclude contracts with foreign partners for the entire export and import volume; diversify marketing forms and acquire additional markets;
- b) secure the entire production earmarked for export by establishing specialized capacities and enterprises and beginning production well in time, in the ranges and at the quality required by the end users, thus continuously increasing foreign currency returns for products sold abroad;
- c) securing the manpower and equipment necessary for on-schedule and competitive construction-assembly operations abroad, and for exporting construction plans, studies and technical assistance;
- d) efficiently utilize the foreign currency funds allocated under the plan for imports, taking care to utilize whenever possible domestically-produced raw and other materials, fuel, machines and equipment; cut down foreign currency expense for goods transportation.

Article 32--Economic and scientific-technical cooperation will take a primary place in our country's economic relations. Emphasis will be placed on cooperation and specialization in the area of machine-building, through balanced exchanges which can contribute to accelerating technical progress and raising economic efficiency. Special attention will be given to developing cooperation aimed at securing raw material supplies for the economy, by expanding the number of long-term contracts and conventions on technical-material supplies and production marketing.

IX. Increasing Economic Efficiency and Applying the New Economic-Financial Mechanism

Article 33--In the 1981-85 5-year plan special stress will be put on increasing economic efficiency, improving the workings of the new economic-financial mechanism, and efficiently utilizing all resources.

Article 34--By 1985, labor productivity calculated on the basis of net production will be 40.4 percent higher than in 1980 in industry, and 30.1 percent higher in construction-assembly sectors.

In order to increase labor productivity, steps will be taken to improve production and labor organization in enterprises, sections and workshops, to raise the degree of production mechanization and automation, to improve labor norms in all branches in line with given equipment, to cut down the number of auxiliary and nonproductive personnel, to introduce the overall contract system in all areas, and to strengthen order and discipline on each job.

Article 35--Some 580,000 new jobs will be created in the 1981-85 5-year plan period.

Personnel requirements will be met by training 1.5 million skilled workers and 290,000 technicians, foremen, engineers and other specialized cadres.

Measures will be taken to fulfill the provisions of the programs on securing, training and improving the professional level of the labor force, so that the educational system and the entire training and recycling system should be capable of meeting the requirements of the country's socioeconomic development.

Article 36--In 1985, production costs per 1,000 lei production-goods will be 8.2 percent lower than in 1980 in national industry, 5 percent lower in construction-assembly sectors; and 5 percent lower costs per 1,000 lei income from public means of transportation.

Steps will be taken to strictly apply the provisions of the new economic-financial mechanism; each economic unit must function on the basis of the principles of workers' self-management and self-economic-financial administration and, in accordance with its own income and expenditure budget, must cover costs from its own resources and make maximum profit.

Article 37--By raising the degree of processing of raw materials and by manufacturing economically valuable products--primarily on the basis of modern technological concepts and high-quality performance--we will raise the index of utilization of basic raw materials and energy calculated on the basis of the value of the production-goods by 30 percent in 1985, compared to 1981.

Article 38--Measures will be taken to increase the efficiency of fixed assets, by utilizing machines and installations to capacity, ensuring good maintenance and exploitation, and making use of all available production areas; by 1985 net production per 1,000 lei nonamortized fixed assets in the processing industries will come to about 800 lei.

X. Increasing the National Income and Raising the Living Standard

Article 39--As a result of increasing material production and economic efficiency, the national income will increase at an average annual rate of 7.1 percent, thus ensuring the necessary resources for the national socioeconomic development fund and for further improving the people's living standard and achieving a new quality of material and cultural life for all the people.

Article 40--By 1985 the total volume of real incomes will be 19 percent higher than in 1980, as a result of the following increases in incomes derived from labor remuneration and social consumer funds:

- a) real remunerations will be 15.5 percent higher in 1985 than in 1980;
- b) appropriate conditions will be created to gradually reduce, by 1985, the workweek to 44 hours in all sectors of activity, made possible by improved work in economic units, rational utilization of work time, and expanded mechanization and automation; units which already have a short workweek will not be affected;
- c) in 1985 the real incomes of peasantry derived from work in agricultural production cooperatives and private farming, calculated per active person, will be 18 percent higher than in 1980;
- d) the average annual social security pension will be about 10 percent higher in 1985 than in 1980. The pensions of members of agricultural production cooperatives and other categories will also be increased;
- e) the average real state allowance for children is envisaged to increase about 12 percent in the 1981-85 period; allowances for children of members of agricultural production cooperatives will also be increased.

Article 41--In 1985 the total volume of goods sales will be 26.6 percent higher than in 1980, and that of public services 76 percent higher.

By 1985, average consumption of major industrial, agricultural and food products per capita and market supplies of durable goods will be the following:

<u>Item</u>	<u>Unit of measurement</u>	<u>1985</u>
Consumption per capita		
--Meat and meat products	kg	68
--Milk and milk products (except butter)	liters	222
--Fats, total	kg	20.7
--Eggs	units	290
--Sugar and sweets	kg	39
--Vegetables and vegetable derivatives	kg	160-170
--Fish and fish derivatives	kg	12.4
--Potatoes	kg	100
--Textiles	sq. meters	30.9
--Knitwear	units	11.5
--Footwear	pairs	3.8
Durable goods per 1,000 inhabitants		
--Radio sets	units	300
--Television sets	units	256
--Refrigerators	units	192
--Washing machines	units	155
--Cars	units	44

Article 42--In order to optimally meet people's requirements, measures will be taken to:

- a) regularly deliver market supplies in the ranges and quality envisaged in the plan;
- b) fulfill the plan retail sales and ensure even supplies throughout the country;
- c) develop and further improve the functioning of the commercial and service networks, and judiciously distribute such units throughout the country;
- [AU081542] d) accelerate the speed of goods conveyance between suppliers, commercial organizations and retail units; expand direct marketing forms.

Article 43--Measures will be taken to improve education and health care, to develop culture, physical culture and sports.

In the 1981-85 period, due to intensive utilization of all existing facilities, the material basis will develop as follows:

- a) Approximately 50,000 places will be commissioned in kindergartens, 6,000 classrooms, 49,000 places in boarding schools, 18,000 places in school workshops; new facilities will be made available for institutes of higher education, especially workshops and laboratories totaling an area of 146,000 square meters;
- b) 6,000 nursery places, 73 dispensary-polyclinics, and 33,000 hospital beds will be made available; in 1985 there will be 2.4 physicians, dentists and pharmacists per 1,000 inhabitants;
- c) 35,000 places will be made available in movie houses and cultural clubs; construction will begin in Iasi for a radio and television studio.

XI. County Development and Socioeconomic Regional Systematization

Article 44--By 1985 the counties will achieve a volume of activities of about 70,000 lei per capita--in terms of updated prices--incorporating industrial, agricultural, construction-assembly and forestry production; and incomes from transportation, cottage industry, services and sales. There will be at least 400 employed persons per 1,000 inhabitants in each county.

Article 45--In the 1981-85 period 900,000 apartments will be built with state funds totaling a living area of 29,500 million square meters; of those, 36,000 apartments will be sold to individuals on the basis of state credits. New public establishments will be built in all the counties, and the water and sewage networks and the fleets of means of public transportation will be expanded.

Article 46--The program of regional systematization will be further implemented with a view to harmoniously developing towns and urban centers throughout the country; steps will be taken to limit built-up areas in towns and villages and

to judiciously organize transportation routes, with a view to developing the towns and communes as basic territorial-administrative units and active economic centers, capable of offering optimal living and working conditions for all inhabitants.

XII. Final Dispositions

Article 47--The indexes of the national uniform plan for Romania's socioeconomic development in the 1981-85 period will be allocated per years and plan holders by a decree of the State Council.

Article 48--The Council of Ministers is responsible for the fulfillment of indexes, production rates and ratios, and material, financial and foreign currency balance as stipulated in the plan. For this purpose, it will:

- a) organize fulfillment of the national uniform plan and establish measures for the ministries and other central bodies, executive committees of county people's councils of Bucharest municipality to ensure steady production activities and to fully achieve the tasks envisaged;
- b) periodically examine plan fulfillment progress and ensure: fulfillment of the itemized and value production; fulfillment of economic contracts; implementation of consumption norms for raw and other materials, fuel and energy; rational management of material stocks; on-schedule commissioning of investment projects and appropriate utilization of production facilities; employment and training of the labor force; strict implementation of the foreign trade plan and foreign balance of payments; implementation of economic efficiency indexes and resolute promotion of the new economic-financial mechanism; balanced domestic markets by correlating increases in people's incomes with increased goods sales and services;
- c) redistribute material resources in accordance with the priorities of the RCP economic policy; put all existing resources and economic potential in the economic flow and better utilize them;
- d) ensure establishment and substantiation of draft annual plans, coordinating proposals from enterprises, centrals, ministries, counties and synthesis bodies with a view to utilizing the country's potential as productively as possible and fulfilling the objectives of the party's economic policy;
- e) forward draft annual plans to the Grand National Assembly for approval, in keeping with the levels envisaged in the 5-year plan, with the results of previous periods and with new elements which have emerged in the development of the national economy.

Article 49--The performance of the 1976-80 5-year plan for the socioeconomic development of the Socialist Republic of Romania, adopted under Law No 4/1976, is endorsed in accordance with the communique of the Supreme Council of Socioeconomic Development, The State Planning Committee and the Central Directorate for Statistics, published in the OFFICIAL BULLETIN of the Socialist Republic of Romania No 17, Section III of January 30, 1981.

LAW ON 1981-85 AGRICULTURAL PLAN PUBLISHED

AU090851 Bucharest SCINTEIA in Romanian 2 Jul 81 p 4

["Law on the Adoption of the Plan for the Development of Agriculture and Food Industry in the 1981-85 Period"]

[Text] The Grand National Assembly of the Socialist Republic of Romania adopts the present law.

Article 1--The plan for the development of agriculture and food industry for the 1981-85 period, established in accordance with the directives of the 12th RCP Congress and with the decisions of the second Congress of Management Councils of Socialist Agricultural Unions and of the Entire Peasantry, of Working People's Councils in the Food Industry, Forestry and Water Management, is adopted.

The major development indexes in agriculture and food industry are the following:

<u>Index</u>	Percentages calculated on the basis of 1980 stable prices		
	<u>1985 provisions compared with 1980</u>	<u>1981-1985 average annual rate</u>	
1. Overall agricultural production (1981-85 annual average compared to 1976-80)	124.4 - 127.4	4.5 - 5	
2. Net agricultural production (1981-85 annual average compared to 1976-80)	138.6	6.8	
3. Work volume at agricultural machinery stations	115.7	3	
4. Net industrial production of the Ministry of Agriculture and Food Industry	152	8.7	
5. Industrial production-goods of the Ministry of Agriculture and Food Industry	141.6	7.2	
6. Foreign Trade volume (1981-85 compared to 1976-80)	153.9	9	
7. Labor productivity in industry, calculated on the basis of the value of net production	138.5	6.7	

[continued]

8. Overall investments for the Ministry of Agriculture and Food Industry from state funds and cooperative funds (1981-85)--billion lei	179.3	
9. Market stock deliveries	127.4	4.9
10. Costs reduction per 1,000 lei production-goods-percentage points		
--in agriculture		
--state agricultural enterprises	12.5	
--agricultural machinery stations (per 1,000 lei income)	11	
--in industry--total of which:	4.8	
--material expenditures	3.7	
11. Public services	247.1	19.8
12. Peasantry's net incomes derived from work in agricultural production cooperatives and private farming, per active person	118	3.4

Article 2--By 1985 the land area under crops will total at least 10 million hectares.

Article 3--Given normal climatic conditions, the following productions of major crops will be attained in 1985:

<u>Item</u>	<u>Unit of measurement</u>	<u>1985 levels</u>
Grain crops	thou. tons	28,500
--wheat	thou. tons	7,600
--corn	thou. tons	16,600
--barley and two-row barley	thou. tons	4,050
Soybean	thou. tons	966
Beans	thou. tons	330
Sunflower and rape	thou. tons	1,260
Sugar beet	thou. tons	12,600
Fiber flax	thou. tons	420
Fall potatoes	thou. tons	6,700
Field vegetables	thou. tons	6,000
Fruit	thou. tons	3,000
Grapes	thou. tons	2,430
Meat on the hoof	thou. tons	4,000
Cow milk	thou. hectoliters	86,700
Wool	tons	64,200
Eggs	thou. units	8,620

The figures envisaged for agricultural production are minimal, and the Ministry of Agriculture and Food Industry and county bodies must take measures to exceed them.

[AU090852] Article 4--By the end of 1985 livestock numbers will be the following:

<u>Item</u>	<u>Unit of measurement</u>	<u>1985 levels</u>
Cattle	thou. head	7,300
of which:		
--cows and heifers	thou. head	3,700
Pigs	thou. head	15,000
Sheep and goats	thou. head	21,500
Egg-laying hens	thou. head	63,300

Article 5--By 1985 the following staples productions will be achieved:

<u>Item</u>	<u>Unit of measurement</u>	<u>1985 levels</u>	<u>compared to 1980--percent</u>
Slaughtered meat, innards, fats and edible byproducts--total	thou. tons	3,010	184
of which:			
--state stock slaughtered meat	thou. tons	1,775	178.9
Canned meat	thou. tons	115	149.4
Fish (also ocean fish)	thou. tons	480	253.2
Fresh milk	thou. hectoliters	9,820	165.7
Butter	thou. tons	68	196.8
Cheeses	thou. tons	200	177.1
Edible Oil	thou. tons	620	167.8
Sugar	thou. tons	1,200	256
Canned vegetables and fruit	thou. tons	565	149.7
Crude wine	thou. hectoliters	10,815	141.4

Article 6--On the basis of envisaged productions, deliveries of staples to the state stocks will be as following:

<u>Item</u>	<u>Unit of measurement</u>	<u>1985 levels</u>
Wheat-rye	thou. tons	5,485
Corn	thou. tons	6,030
Barley--two-row barley	thou. tons	625
Sunflower	thou. tons	1,156
Soybean	thou. tons	835
Beans	thou. tons	177
Sugar beet	thou. tons	11,400
Fiber flax	thou. tons	400
Potatoes	thou. tons	2,600
Field vegetables	thou. tons	4,000
Fruit	thou. tons	2,050
Grapes	thou. tons	1,615
Meat on the hoof	thou. tons	3,100
Cow milk	thou. hectoliters	47,070
Wool	tons	60,200
Eggs	thou. units	4,300

Article 7--In order to fulfill the plan objectives on accelerating the process of intensive development and modernization of agriculture, the Council of Ministers will ensure that the Ministry of Agriculture and Food Industry, the National Union of Agricultural Production Cooperatives, the Academy of Agricultural and Silvicultural Sciences, county agricultural bodies and joint state and cooperative agro-industrial councils take measures to:

- a) Rationally utilize all tillable agricultural land; fully utilize irrigated land;
- b) Increase the productive potential of agricultural land by performing melioration work, eliminating excess humidity, combating soil erosion and salinity and organizing crop rotation on the land belonging to each agro-industrial council; irrigation systems will be updated and supplemented by drainage work so as to utilize all available potential;
- c) Ensure high-quality seed and seedlings for all crops, suited to the soil and climatic conditions prevailing in each area; agricultural work will be performed at optimal time and the specific methods employed for each crop will be strictly observed; tractors and other agricultural machines will be utilized to capacity. Organic and chemical fertilizers will be applied in accordance with the agricultural-chemical structure of each soil type and with the crop grown, so as to obtain maximum efficiency. Pesticides and herbicides will be applied rationally and efforts will be made to achieve a better correlation between chemical and mechanical means, with a view to cutting down the quantities used, reducing soil pollution and material expenditures;
- d) Intensify the mechanization of agricultural operations and perform them at optimal time, so as to increase agricultural production, preclude losses and reduce fuel and energy consumption;
- e) Develop the production of vegetables and potatoes in quantities and ranges suited to the consumer needs of each county, industrial and export requirements; efforts must be made to ensure fresh produce for as much of the year as possible;
- f) In the fruit and grape growing sectors, existing plantations will be modernized and new ones will be planted on nontillable land; at the same time, care will be taken to apply the growing systems suited to each specie, with a view to increasing fruit and grape production;
- [AU090853] g) Increase numbers of livestock and average and overall animal production, by improving breeds and breeding, especially of cattle and sheep; increase birth rates and reduce animal death rates; develop and modernize industrial-type zootechnical complexes and farms, as well as fish-growing units; greater attention will be given to growing silk worms, bees and fur animals;
- h) Fodder production will be increased by improving yields per hectares for both cultivated fodder plants, and natural pastures, by expanding double crops and fully utilizing all byproducts from the food and agricultural industries;

- i) Enhance the role of joint state and cooperative agro-industrial councils, which must become leadership centers for all agricultural activities and for socioeconomic development on their territory, for solving the major political, economic and social issues of communes;
- j) Improve the organization of production and labor in all agricultural units, strengthening order and discipline, increasing the sense of responsibility at all levels, enforcing strict application of production technologies, and ensuring performance on schedule and at a good quality of all agricultural operations;
- k) Measures will be taken in the food industry to completely and better utilize agricultural raw materials; to utilize existing facilities to capacity and to organize new, small-scale capacities in the neighborhood of sources of raw materials. Each unit will diversify its production in order to reduce the need for long-distance transports and supply local consumers;
- l) Increase efficiency in all agricultural and food industry units, reduce material expenditures and consumptions of raw and other materials, fuel & energy.

Article 8--In order to achieve the planned levels of agricultural production, the agricultural technical-material basis will develop as follows:

- a) Throughout the 1981-85 period the agricultural sector will be supplied with 86,000 tractors, 15,800 self-propelled multifunctional, high-capacity combines for grain harvesting, combines for sugar beet harvesting, potato harvesting machines, and other agricultural machines and equipment;
- b) An area of 600,000 hectares will be irrigated, so that by the end of 1985 the total irrigated area will reach 2.9 million hectares;
- c) Drainage work will be performed on an area of 940,000 hectares and antisoil erosion on 950,000 hectares, of which operations on 575,000 hectares will be financed by the state;
- d) The agricultural sector will be supplied in this period with 11.64 million tons of chemical fertilizers based on azot, phosphorus and potash, and 290,000 tons active-substance pesticides.

Article 9--The Ministry of Agriculture and Food Industry, the county people's councils, county general directorates for agriculture and food industry, and agricultural producers' commissions will help individual farmers with seed, seedlings, valuable studs, technical know-how and guidance, with a view to obtaining the largest possible vegetable and animal productions.

Joint agro-industrial councils and agricultural machinery stations will be responsible for the agricultural work performed on land privately worked by cooperative members.

Article 10--In the 1981-85 period, the overall volume of investment funds for the Ministry of Agriculture and Food Industry will be 179.3 billion lei, earmarked primarily for equipment required to expand agricultural mechanization, modernization in vegetable and animal production, land melioration and new capacities for the food industry, particularly for sugar, oil and beer.

In order to carry out the planned investment projects, measures will be taken to:

- a) Commission schedule the projects featured on the investment lists of the Ministry of Agriculture and Food Industry, secure technical-economic and construction studies and ensure steady work on building sites;
- b) Strictly implement schedules for attaining planned parameters; while investment projects are still at the building stage, measures should be taken to ensure construction-assembly and delivery of equipment in accordance with investment schedules; periods envisaged for dry and test runs must not be exceeded; personnel must be trained so that the new capacities can be run appropriately;
- c) Optimally carry out investment projects, on the basis of standard technologies and designs, continuously reduce consumption of metal, cement and other energy-intensive materials, and widely utilize local materials and reutilize recoverable ones.

Article 11--The Council of Ministers will ensure that the Ministry of Agriculture and Food Industry, the Academy of Agricultural and Silvicultural Sciences, and institutes and units of scientific research concentrate their scientific research, technological development and technical progress activities on the following objectives:

[AU090854]

- a) Designing new technologies to improve poor breeds and species; efficiently utilize irrigated land; rationally apply fertilizer and pesticides; appropriately distribute species and crossbreeds according to soil type; judiciously rotate crops;
- b) Create new strains and cross-species of seeds and seedlings with high productive potential and resistant to low temperatures, drought and other unfavorable environmental conditions, to disease and pests, and with a high percentage of useful substance;
- c) Improve and create new livestock breeds with a higher level of productivity; devise new technologies aimed at better utilizing fodder and adopting new resources, reducing specific fodder consumption, rapidly increasing production on natural pastures and hayfields, finding more efficient methods for preventing, diagnosing and treating diseases;
- d) Fully utilize agricultural raw materials and design nutritive products and mixtures, which should permit rational feeding, in accordance with scientific norms;

- e) Facilitate utilization of new resources of agricultural and biosynthesis raw materials; achieve products rich in protein, vitamins and minerals in accordance with the various needs of the people; produce canned goods and pre-cooked food which can retain as many of the natural properties of the respective products as possible;
- f) Increase extraction productivity for sugar beet and other agricultural raw materials, as well as the oil contents of sunflower and soybeans.

Article 12--In order to increase efficiency in all foreign trade and international economic cooperation activities in the areas of agriculture and food industry, measures will be taken to:

- a) Completely fulfill the goods production planned for export, by organizing specialized capacities and enterprises to deal exclusively or mostly with export production, in accordance with the structural ranges and qualities required by the customer, thus continuously increasing foreign currency returns for products marketed abroad;
- b) Efficiently utilize foreign currency funds allocated under the plan for import, by utilizing primarily locally-produced raw and other materials, fuel, machines and equipment, and endeavoring to cut down foreign currency expenses involved in goods transportation.

Article 13--In the 1981-85 period special stress will be put on increasing economic efficiency, improving the functioning of the new economic-financial mechanism and productively utilizing all resources.

Article 14--In 1985 production costs at state agricultural enterprises will be 12.5 percent lower per 1,000 lei production than in 1980, 11 percent lower at agricultural machinery stations, and 4.8 percent lower at industrial units of the Ministry of Agriculture and Food Industry.

For this purpose, each agricultural and food industry unit will have to function on the basis of the principles of workers' self-management and economic-financial self-administration; within the exercise of their own income and expenditure budget they will have to cover costs from their own resources, and attain maximum possible profits.

Article 15--In 1985 the peasantry's real incomes derived from work in agricultural production cooperatives and individual farming, calculated per active person, will be 18 percent higher than in 1980. Children's allowances for members of agricultural production cooperatives will also be increased. Pensions for members of agricultural production cooperatives and for peasants in noncooperative areas will also be increased, as a result of extended period of contribution to the pension fund and of the higher value of products delivered to the state stock.

Article 16. The indexes of the 1981-85 development plan for agriculture and food industry will be parceled out per year and plan holders by a State Council decree.

Article 17--The Council of Ministers, the Ministry of Agriculture and Food Industry, the departments, general economic directorates, centrals and enterprises, executive committees of county people's councils and of the Bucharest municipality are responsible for complete fulfillment of the development plan for agriculture and food industry in the 1981-85 period.

For this purpose, measures will be taken to optimally fulfill plan tasks and increase economic efficiency in all areas of agricultural and food industry activity.

CSO: 2700/313

MEASURES SUGGESTED FOR STIMULATING EXPORT ACTIVITY

Bucharest REVISTA ECONOMICA in Romanian No 22, 29 May 81 and No 23, 5 Jun 81

Article by Adrian Constantinescu, Victor Babiuc and Nicolae Murgu: "Ways of Stimulating the Export Trade Under the New Economic-Financial Mechanism"

No 22. 29 May 81 pp 11-12

Text/ The present state of the world economy, characterized both by growing economic inter-dependencies among the states of the world and by growing competition on the international markets, is making export development a main consideration in the economic policies of most states. And against that background the necessities of national economic development, especially through greater participation in the international division of labor, are making export development a priority consideration in Romania's trade policy. As Nicolae Ceausescu pointed out, "The export trade is no voluntary pursuit or any abstract desire to participate in the world exchange of values. Further development of the Romanian economy would be impossible without a regular export trade and extensive development of exchanges of goods with other countries. Foreign trade, and chiefly the export trade, are essential to development of Romanian economic activity and to the general improvement of the entire Romanian people's welfare."

The need to develop exports has brought about intensified efforts to take measures that will stimulate export production and sales abroad. At present practically all countries sharing in the world economic cycle, whether they are socialist or nonsocialist or developed or developing countries, are employing methods of stimulating exports that vary with the level of economic development, the principles basic to the organization and operation of the economic mechanism, the aims pursued, the degree of dependence upon the foreign market, the competitive power of the domestic products etc.

These measures are intended to help export production, improve its structure, and develop the foreign sales of the national enterprises and firms. Through their use many countries have made some definite gains in the overall growth of their exports. They actually consist of aids granted to export production and its marketing abroad, and they are stimulating because, in accordance with the particular purposes pursued, they provide better conditions for production and foreign sales than those created for production and sales on the domestic market.

As for conditions in Romania, in connection with generalized application of the new economic-financial mechanism it is possible to perfect and diversify the use of such

methods of stimulating exports as customs exemptions and aids granted for imports for export production, encouragement of export production through profits, granting credits for export production and marketing, use by the producer units of part of their above-plan foreign exchange collections, formation of special funds in the economic units to encourage the workers, etc. These methods can create a climate favorable to export activity and a use of economic forces and levers to stimulate that activity. For as the party secretary general said, "... we must realize that the problems of export production and securing the best possible cost rate and better use of raw materials for exports are some of the basic problems of economic activity and of the new economic mechanism."

In this respect the possible courses of action to improve the methods of stimulating Romanian exports can be divided into three main categories, namely budgetary measures, fiscal measures, and financial-banking measures.

Budgetary Measures

The Law on Economic-Financial and Foreign-Exchange Self-Administration specifies use of the fund to regularize market influences (annually provided in the state budget according to Article 3f Paragraph 2 of Law No 12 of 1980) solely to cover the price deficits recorded in the export of products vital to the national economy. Strict observance of this provision is particularly important because general use of this fund, for any commodity, would tend to destroy its stimulative character.

- Revision to improve the mechanism for awarding export bonuses for outstanding achievements in the field*. Improvement of the operation and use of this mechanism should consist, among other things, of differentiating the amounts of the export bonuses according to the degree of processing of the exported commodity, the export connection, the actual financial results of the export, and whether a major penetration of the market of a given country or group of countries is accomplished. It should also provide a system guaranteeing distribution of these bonuses solely to those who have directly contributed to the outstanding export results.

- State participation, out of funds in lei specially established in the budget, in selective and proportioned coverage of outlays intended to considerably increase the export volume (making major market studies, financing some highly important advertising campaigns, etc.). To encourage the enterprises to make the best possible use of those funds, consideration might be given to making the respective financial aid conditional upon actual results in increasing the exports. If the specified results are not obtained within the specified time limits, those funds would be automatically converted to credits to be repaid by the beneficiary enterprises at certain intervals, at interest rates normally charged to finance export-import activity.

This applies particularly to the sectors with processed products of peak technology (electronics, precision machinery, measurement and control devices, and the low-tonnage chemical industry (dyes, varnishes, drugs, catalysts etc.)) the producers of which without exception throughout the world allocate major sums for study and market penetration through extensive advertising campaigns.

When we consider just a few of the original Romanian drugs whose future is indicated by highly effective therapeutic results, such as Boicil, Covaltin and Ulcosilvanil, we immediately realize the need of supplementing the present efforts with new market

*This method was provided, in a general way, in Law No 19 of 1971 (amended in BULETIN-UL OFICIAL Part I, No 3, 12 January 1977).

study and advertising campaigns to expedite the process of making these products known on the world market.

Fiscal Measures

Incentives for producers:

- Modifying application of the system of deducting part of the value of the net output for society by granting a more favorable system for the portion of the total output that is designated for export;
- Using different quotas for payments out of the planned profits into the state budget depending on whether or not the profits were made on export production and granting a more favorable system in the first case;
- Setting different quotas for payments into the budget out of the profits (planned and above plan) made by foreign trade enterprises.

A number of additional factors are to be considered in the practical application of these measures. For instance, the more favorable systems for export production (proposed in the first two paragraphs above) could be applied by reducing the percentage quotas for payments into the budget of part of the planned profits or part of the value of the net output, or by subsequent automatic partial repayments of the quotas already paid into the budget, upon actual export (possibly in the first quarter of the year following the plan year).

The quotas for reduction (or repayment) of the payments into the budget out of the planned profits would have to be computed solely on the basis of the profits made on export production or the total profits made by the production unit (in the latter case, conditional upon complete fulfillment of the physical and value export plans).

The quotas for reduction (or partial repayment) of the payments into the budget would have to be set differently according to the degree of processing of the exported products and their importance to the national economy, the proportion of parts and subassemblies in the total output for export, the export connection, and the kind of operation whereby the export was effected (normal export, export on a credit basis, export to a counterpart, etc.).

The different quotas for payments into the budget out of the profits made by the foreign trade enterprises would have to be conditional upon fulfillment and/or overfulfillment of the plan and set, among other things, according to the total volume or the proportion in the total activity of products with a high degree of processing, trade operations for a foreign exchange contribution, export operations in compensation, and export connections.

The more favorable system should take the form either of reductions of payment quotas or of partial repayments of payments already made (in the latter case, after the exports are actually effected).

Use of the funds formed through the said fiscal aids (mainly on the level of the producer units and foreign trade enterprises but also on that of the competent ministries) should be within limits permitting great flexibility in decision-making by the beneficiary units (in keeping with the requirements of workers self-management and of

economic-financial and foreign-exchange self-administration), with special emphasis both upon the necessary outlays directly or indirectly contributing to growth of the export volume (small-scale investments recoverable in a short time to improve the quality and to prepare and pack the goods for export, equipment of headquarters in Romania and abroad for more effective export activity, organizing advertising campaigns, and financing foreign travel as well as the activity of teams of traveling salesmen etc.) and upon supplementing the funds for encouragement of personnel to enhance the volume of foreign sales and their efficiency.

No 23, 5 Jun 81 pp 7-87

Text 7 In this issue we continue publication of the study on the economic levers for stimulating exports, presenting some opinions on the customs system and the financing of production and marketing. (In the previous issue we presented the levers of a budgetary and fiscal nature.)

Customs Aids

- More efficient use of Romania's import duties to carry out the necessary alignment of the mechanisms for setting export prices with those in international use, the amounts of the customs duties paid by the importing units to be directly reflected in the importing enterprises' budgets of incomes and outlays. This would be a further incentive to the importing enterprises to manage according to the economic principles of the import policy.
- Long-range application of a general system of exemptions from and reductions or repayments of import duties on a selective basis and in close correlation with the nature and purpose of the imports effected and with their role in export development.

In connection with efficient application of the tariff and direct determination of the incumbent payments of customs duties on the level of the importing units, we should test and then permanently establish systems of exemptions, reductions and/or repayments of customs duties on imported raw materials, materials and equipment solely for increasing export production and raising its technological standard. In differentiating the exemptions and the quotas for reduction and/or repayment of customs duties we should allow, among other things, for the degree of processing, the national content of the exported products, and the export connection (according to the priorities set by the national trade policy).

Financial-Banking Measures

Financing of export production:

Export production can be financed both by use of internal resources and out of attracted resources (credits), in lei or foreign currency. To improve the use of those instruments, the following points may be considered:

- Formation of internal funds, for the express purpose of improving export production, out of the total funds acquired by benefiting by fiscal aids;
- Use of the funds in foreign exchange acquired by exceeding the planned profits on exports, with a priority on equipment to increase and improve the quality of the output to be sold abroad (as also specified in Article 43 of Law No 12 of 1980).

In pursuance of the principles of workers self-management and of economic-financial and foreign-exchange self-administration, sufficiently flexible use of the respective funds (in lei or foreign exchange) by the direct holders should be provided for. To this end, in addition to the possibility of using them within the planned limits for the following year, certain quotas out of these funds should be designated for immediate use during the year, with a minimum of approvals from the higher organs and banking organs, in accordance with a number of market factors and some additional express requirements of the foreign customers (the satisfaction of which determines the additional growth of the exports' effectiveness).

- Granting more favorable terms (concessions) for crediting export production than those for production for the domestic market.

As contrasted with the present situation, where there is no distinction between crediting production for the domestic market and crediting that for the foreign market (charging the same interest rate of 5 percent a year and setting the same repayment dates), export production should be credited at interest rates 1-2 percentage points lower and with longer repayment deadlines than those granted for production for domestic sale. Of course a number of distinctions should also be made in the terms on which credits for export production are granted, according to the period of recovery, out of the export incomes, of the credited investments, the degree of processing and the importance of the finished product, the export connection, etc. This purpose can be accomplished not only by lowering the interest rates and extending repayment of the credits for export production, but also by raising the interest rates and shortening the repayment deadlines for production for the domestic market (so as to ultimately provide a margin in favor of export production).

In order to grant such credit concessions a special fund (in lei and foreign exchange) should be planned apart from the general funds for crediting production on the level of the national economy, a special fund in whose management representatives of some important industrial centrals and foreign trade enterprises should participate in addition to the coordinating and banking organs.

The credit concessions should be granted on the basis of the beneficiary enterprises' commitments to repay the funds received with the incomes obtained by effectively increasing the exports within a given period (2-5 years). In case of default, the credit concessions would have to be converted to ordinary credits at recalculated interest rates.

Financing of foreign trade operations:

The following measures could be considered in order to stimulate the foreign trade enterprises' export activity by means of appropriate financial-banking methods:

- Granting more favorable terms (concessions) for crediting the activity of exporting foreign trade enterprises differently according to certain criteria.

Crediting should be at interest rates lower than those charged in the case of sales on the domestic market. A number of factors are to be considered in distinguishing the crediting terms, such as the growth rate of the exports in the year before the credits are granted, the structure and importance of the exported products, the volume (or proportion in the total activity) of the trade operations for a foreign exchange contribution and/or the operations in compensation, etc.

- Correlation of the terms for granting credits to finance the general activity with the terms on which the exporting enterprises grant export credits to foreign customers, because the differences between the lower interest rates on the credits granted certain foreign customers on the basis of agreements and the interest rates on the credits obtained by the foreign trade enterprises to finance their own activity are paid out of the latter's financial results at present. To prevent this situation from impairing the enterprise's activity, the respective difference would have to be covered out of the state budget or the enterprise would have to benefit by credits at concessionary interest rates, equal to those agreed upon for the foreign customer, for the part of its total activity pertaining to export on terms of preferential credit.

- Crediting exports. Now that competition on the international market is intensified, in order to penetrate and remain on the foreign markets (especially with certain products, particularly in the machine building field) it is vital to enhance competitive power in the export trade, especially through postponed payment terms for foreign customers. In view of these considerations and the need of further improvement in crediting exports of Romanian products, the following measures could be considered:

- Reducing the administrative intermediaries and the formalities in granting export credits;

- Setting aside special funds, within the planned credit ceiling, out of which to cover the differences between the preferential interest rates granted some foreign customers on the basis of governmental agreements and the interest rates on the credits for financing the exporting enterprises' activity;

- Permitting (not only *de jure* but also *de facto*) unguaranteed short-term credits to be granted to some traditional customers, because in recent practice such credits have been granted less and less frequently although the regulations in force make it possible. This impairs to some extent our relations with some traditional customers with verified financial credit.

- Institutionalizing the system of underwriting of export credits by an independent state body that would offer the foreign trade enterprises such aids, assuming the risk of nonpayment. These aids could also be provided by a specialized organ or agency operating under the BRCE (Romanian Foreign Trade Bank) in order to guarantee the foreign trade enterprises payment and to assume any risks that lead us to regard the granted export credits as unguaranteed. Then the foreign trade enterprise could handle the credits within the system of guaranteed export credits and expedite negotiations and improve the contracts thereby.

- Expanded use of credit lines for export. Such a policy would contribute to a better alignment with international practice. The lines of credit would have to be used within the limits expressly set by the foreign credit ceilings in the balance of payments and differently according to the extent and duration of the export operation, the importance of the exported products, and the importance and credit of the potential foreign partners, beneficiaries of lines credit, etc.

- Granting more aid, before the discussions with the foreign partners, on the part of the competent organs (Ministry of Finance and the BRCE) concerning the preliminary levels of the crediting terms to be negotiated. This aid would be intended, among other things, for organization of a permanent information system concerning the crediting

terms employed by certain countries in a number of representative contracts, the possibilities of repayment on the best terms by various partners of the credits obtained, noteworthy facts and situations on the international level in connection with granting and repayment of export credits, possibilities of insuring, reinsurance and guaranteeing repayment of credits, etc.

Improvement of export crediting in the above-mentioned directions could lead to elimination of some defects still present in export activity.

More and more new economic-financial inducements are surely in prospect in the next few years that will attract investors to export production even in the stage of design and investment. We refer to use of the economic levers conducive to a better production structure and to creation of production capacities promptly adjustable to the market demands. A primary consideration is to grant some aids to specific investment for those who are creating capacities for products in demand on the foreign market and products manufactured with high values per unit of measure.

The above-mentioned courses of action involve measures conducive to encouragement of export activity, to both quantitative and qualitative growth of exports, to their greater effectiveness, and to increased foreign exchange collections of the nation. At the same time the proposals are formulated in the light of the necessity and tasks of basing all foreign trade activity firmly on the principles of workers self-management and of economic-financial and foreign-exchange self-administration.

Consideration and implementation of all these potential measures (or only some of them), determination of the correlations and direct or indirect effects upon other economic fields, and establishment of a calendar for this purpose require further analyses, general and sectorial, of the actual possibilities of their application and their suitability, which analyses are to enlist extensive participation of the decision-making organs, the operational production and export units, and the research units in the fields of industry, agriculture, finance, prices etc. According the foregoing are to be regarded as potential courses of action for improvement of the series of measures to stimulate Romanian exports in the light of the new economic-financial mechanism.

5186

CSO: 270/289

WATER MANAGEMENT PROGRAM, PROBLEMS OUTLINED

Bucharest REVISTA ECONOMICA in Romanian No 23, 5 Jun 81 pp 15-16, 30

Article by Ion Iliescu, chairman of the National Water Council: "A Complex Program in the Service of Economic and Social Progress"

Text 7 Why has the problem of water become in recent years the object of such wide concerns and even of real alarm signals? People are even talking about a possible water crisis, comparable to the energy crisis! Are they perhaps not exaggerating? What has recently happened in the balance of water on the planet to justify these concerns and alarm signals?

The decisive element is the constant rate of the rise in the drawing and consumption of water imposed by industrial civilization and by the intense process of pollution of the watercourses and the water table. As regards our country, reflecting the general process of economic and social growth, the drawing of water from different sources and the consumption have had an extremely fast rise in the last 30 years.

While about 1.4 billion cubic meters of water per year were drawn from different sources of water in 1950 for different uses (industry, agriculture, municipal administration), a drawing potential of over 20 billion cubic meters was reached in 1980, with the requirements rising to 35 billion cubic meters in 1990 and to 45 billion cubic meters after the year 2000.

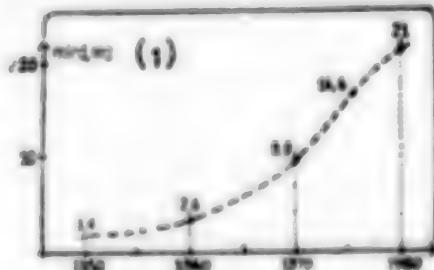


Figure 1. The Growth of the Drawing of Water

Key: 1. Billions of cubic meters

Of course, in itself the process of the rise in water use is positive, reflecting the development of economic and social activity, the appearance of new industrial

platforms and production capacities, the development of the cities and of urban comfort, the modernization of agriculture—the expansion of irrigated areas, of live-stock complexes and of piscicultural facilities. However, the meeting of these rising requirements is being done with greater and greater difficulties and with greater and greater financial and material efforts.

In terms of structure, the consumption in 1960 was as follows:

Industry used about 9 billion cubic meters of industrial water and over 1.5 billion cubic meters of potable water; the population, around 600-700 million cubic meters (water distributed in a centralized manner, without taking into calculation the well and spring water used by the population); agriculture, about 8 billion cubic meters (potentially; less water was actually used in irrigation systems in 1960—around 5 billion cubic meters—due to the rainfall regime in the spring and summer period); pisciculture, about 2 billion cubic meters.

The consumption proper is less than the quantities of water drawn. About 9 billion cubic meters of the water drawn, especially by industry and localities, are returned to the watercourses after use, but in the form of waste water (namely, with different degrees of chemical, biological, bacteriological, thermal and other pollution), which leads to deterioration of the quality of the watercourses and thus of the source for uses downstream. Much of the water used for irrigation goes underground, adding further to the water table.

As long as the water resources easily met, in a natural regime, the requirements for the different uses, particular problems were not posed. However, the problems have become complicated as the ratio between the water resources and the requirements has also become closer and closer.

What is the situation of the water resources in our country? We can count on three basic sources: the Danube, inland rivers and underground water.

The Danube is the richest source of water. With mean multiannual flows of about 6,000 cubic meters per second and thus with a total annual stock—in an average year—of 170 billion cubic meters on entering our country's territory, it may seem that the Danube alone would meet all the future requirements of the country. And, in fact, it is used today as a main source of supply for the biggest irrigation systems in the country—on an area of about 2 million hectares. However, we cannot include in the balance the whole stock of water transported by the Danube, for many reasons. First, due to its status as a main artery of European navigation, which requires the providing of minimum levels needed for navigation. However, in some arid periods of summer and fall, when the Danube's flows can fall even below 2,000 cubic meters per second (precisely when the water requirements for other uses, especially in agriculture, are at a maximum), restrictions on drawing are necessary. Second, due to its international status, the drawing in prospect, especially upstream, by the other Danubian states must be taken into account. Third, due to its position on the border of the country's territory, the Danube can meet only the requirements in a limited zone, the southern and southeastern zone of the country.

Consequently—in the balance of water resources—a usable potential of about 20-25 billion cubic meters from the Danube is taken into calculation.

The network of inland rivers represents the main source of water for covering the different uses on the country's territory. At the present and future level of the water requirements, we must say that, in particular, the flows of our rivers are relatively small. In an average hydrologic year, the total of the flows transported by all the inland rivers amounts to 37 billion cubic meters, which comes to around 1,600 cubic meters per capita per year, putting us in 21st-22d place among the European countries. But this is not all: the 37 billion cubic meters cannot be taken into calculation as an element of the balance, since their use is not possible, due to the very irregular distribution in time. This means that in a natural, unharnessed regime the inland watercourses can provide for the drawing of only about 5-6 billion cubic meters with continuity! Consequently, in order to raise the degree of use of this source of water, it is necessary to achieve on the watercourses storage lakes that could retain volumes of water from the periods of high water (thus helping also to reduce its amplitude and thus the floods in the zones downstream) and would redistribute it in the arid periods.

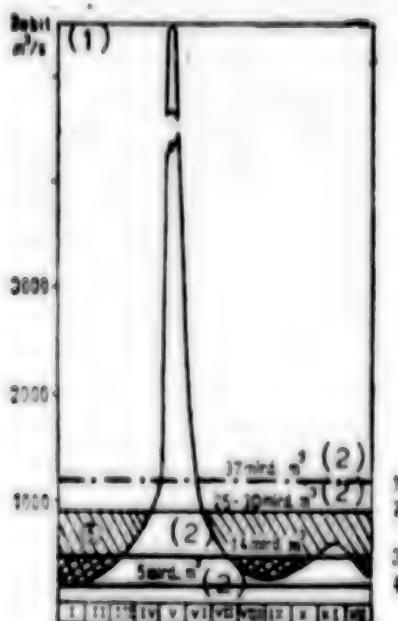


Figure 2. Overall Annual Hydrograph for Inland Rivers:

1. Volume of water flowing in an average year; 2. Volume of water provided for uses in the future through regularization in storage lakes; 3. Volume of water provided for uses in the 1985 stage through regularization in storage lakes; 4. Volume of water provided in a natural regime; 5. Volume of water regularized through storage lakes in the future. On the average, on the main inland rivers, the ratio between the minimum and maximum flow of high water is 1 to 200, and on some watercourses it goes up to 1 to 1,000 and even 1 to 2,000.

Key: 1. Flow--cubic meters per second

2. Billions of cubic meters

From the studies made in all the hydrographic basins of the country for completely harnessing them in the future, the achievement of over 1,000 storage lakes, with a

total volume of over 30 billion cubic meters, is proposed, which could make it possible to raise the potential of utilizing the sources of water of the inland rivers to about 20-25 billion cubic meters in a year.

Deposits of underground water, both from the water table and from very deep strata, constitute the third source of water. From the existing records, these deposits represent a potential of about 8-8.5 billion cubic meters. Of this, however, it is possible to count on a usable technical and economic stock of about 4.5 billion cubic meters per year.

In this way, the total of the three water resources represents a prospective potential of about 50 billion cubic meters per year, to which should be added the possibility of repeatedly using some quantities of water, on the condition of ensuring and protecting the quality of the water.

At the present time, about 2-2.5 billion cubic meters of water are drawn from underground strata (over half of their potential), 11 billion cubic meters from inland rivers (about twice their potential in a natural regime; the surplus has been obtained through storage lakes and diversions of flows from other basins, achieved over the years, and through multiple utilization of volumes of water on the courses of the rivers) and 8 billion cubic meters from the Danube.

The problems of providing for water uses in the future and of utilizing the country's water resources in a complex and rational manner formed the object of the National Program for Harnessing the Hydrographic Basins in the Future. Drawn up under the direct guidance of the higher party and state leadership, with the participation of a large number of specialists in research, design and educational units, discussed on a national level, including at the Congress of the People's Councils in February 1976, and adopted as a law by the Grand National Assembly in April 1976, the national program provides for the complete and complex harnessing, in a unitary view, of all hydrographic basins, in order to optimally use the water resources and provide for all uses, in step with the economic and social development of the country. The attainment of the program's objectives will be spread over many decades, implying great financial efforts, a huge volume of work and big consumptions of materials, which will be concretized in a large number of complex hydrotechnical facilities and other work in the hydrographic basins.

The national program provides for:

The construction of 1,400 lakes of billions of cubic meters, including 24 billion cubic meters for water supplies and 10 billion cubic meters for high-water reduction;

Over 2,000 km of diversions (canals, galleries, pipelines) for the transfer of 3 billion cubic meters of water to zones short in water resources;

Damming on 9,000 km of watercourses (combined with volumes of reduction upstream) for protecting localities and freeing agricultural land from floods;

Riverbed calibration and bank protection on 12,000 km of watercourses;

Work for combating soil erosion, especially in the drainage basins of the storage lakes (the total area affected is 7 million hectares, including 4 million hectares in an advanced stage);

Afforestation of degraded land, arrangements for torrents, and forest belts for protecting the storage lakes, dikes and other hydrotechnical facilities;

The utilization of the entire power-production potential of the watercourses, figured at 40 billion kilowatt-hours (including 10 billion kilowatt-hours on the Danube and 2 billion kilowatt-hours in microhydroelectric power stations, with an installed power of about 13,000 megawatts);

The development of navigation on some watercourses, including canals (Danube-Black Sea, Danube-Bucharest, Siret-Ialomita-Mostiștea and so on), and the development of pisciculture, recreation and nautical sports;

Measures for protecting the quality of the water, through the achievement of purification plants for all uses that evacuate waste water, with the recovery of useful substances, through the promotion of technologies with low water consumptions, through the recycling of water in technological processes and of cooling water, through the utilization of waste water and sludge from city purification plants and livestock complexes for the irrigation of agricultural land, and so on.

The 1976-1980 period also constituted the first stage of attainment of the objectives of the national program. In that period, storage lakes with complex functions (power production, protection, water supplies), totaling a volume of 2 billion cubic meters, were put into operation, raising the total volume of the main storage lakes on inland rivers to 6 billion cubic meters (the over 1,000 fish-breeding ponds, which do not affect the regime of the watercourses, are not included in this). Over 2,000 km of regularization work were achieved--riverbed calibration, damming and bank protection, which, together with the volumes of high-water reduction, increased the degree of protection of localities and precincts from floods (thus, 900 of the 1,500 localities affected by floods in 1970 and 1975 now possess protective facilities).

A large volume of work for water supplies of localities, industrial platforms, livestock complexes, piscicultural facilities and irrigation systems (totaling a capacity for additional drawing of water flows of 5 billion cubic meters) has been done.

If we refer to the supply of potable water, the effects of the efforts made by the national economy to raise the degree of urbanization of the localities and increase this indicator of the population's comfort are graphic: as compared to 101 localities connected to water-supply systems in 1950, the number of them came to 1,363 in 1979; in the same period, the distribution network grew from 3,700 km to 17,380 km and the quantity of potable water distributed grew from 113 million cubic meters to 2.4 billion cubic meters.

The hydropower facilities achieved in the last period, from 1975 to 1980, raised the installed power of the hydroelectric power stations from 2,630 megawatts to 3,500 megawatts and the production of electric power from 8.7 billion kilowatt-hours to 11.3 billion kilowatt-hours, which is equivalent to the power produced by 4.5 million tons of conventional fuel.

In that period, there was an increase of over 900,000 hectares in irrigated area, 700,000 hectares in reclamation work and 800,000 hectares in work for combating soil erosion, and torrent-correction work was done on 370 km and afforestation on 30,000 hectares.

For protecting the quality of the water, another 300 purification plants and stations were achieved (both at industrial units and in localities), with the number of them rising to 3,640.

In the current stage, we are in the phase of putting the finishing touches on the provisions for the 1981-1985 5-year period.

In this interval, provision is being made for the achievement of new, multipurpose storage lakes with a total volume of over 2 billion cubic meters, the development of the water-supply capacities for industrial and agricultural units, localities and irrigation systems by another 6-7 billion cubic meters, the expansion of irrigated areas by another 600,000-700,000 hectares, regularization and damming of water-courses on another 3,000 km, and the reclamation of new areas of land, especially in the zone to the north of Bucharest, on the western plain and in Moldavia (on the flood plains of the Jijia and the Birlad). New hydropower capacities totaling an installed power of 2,700 megawatts (just the capacities installed in microhydroelectric power stations, which will be set up on watercourses, especially in mountain zones, will comprise 30 megawatts of this) will be put into operation within the framework of the power-production program (a priority program in the new 5-year period).

One of the basic tasks of the National Water Council, in cooperation with the other holders of investments and the State Planning Committee, is to ensure the optimum combination and suitable correlation of the different categories of work in the hydrographic basins. Of them, especially the following should be borne in mind:

The correlation of the work of regularization and especially of damming of water-courses with the achievement of volumes of reduction in the zone upstream, in order to avoid increasing the floods downstream by intensifying the high water and raising its speed of propagation due to narrowing the riverbeds. Such phenomena have already been produced as a result of moving up some damming in earlier periods and being late with the scheduling or execution of storage or facilities for high-water reduction on the upper course of the Olt and some parts of the basins of the Cris Rivers, the Somes, the Birlad and other watercourses, which necessitates that in the next period priority be given to the work of high-water reduction;

High values of solid flows (dragged or suspended alluvium) are registered, especially in some basins in the sub-Carpathian zone, as a result of the intense processes of soil erosion on forest or agricultural land and the many torrential formations with a great power to carry solid materials, especially in periods of high water. From this viewpoint, our rivers are true carriers that transport annually over 50 million tons of alluvium (on the average, 2 tons for each hectare of the country's territory, going up to 25 tons per hectare in some zones, especially in the bend of the Carpathians--in Vrancea and the basin of the Buzau). Although this natural phenomenon cannot be eliminated, it can be reduced. This is necessary especially under the conditions of setting up storage lakes, which--in zones with intense processes of erosion and much transportation of solid flows--run the risk of being clogged in

very short periods of time, as has happened with some small-sized lakes with a power-production function on the Argos and the Olt. The only solution is to perform in advance--in the drainage basins of the lakes scheduled in the schedules for hydro-technical facilities--work for combating soil erosion, reducing the torrents, protecting the banks and retaining the alluvium in the tributary courses, costly work, but necessary. Otherwise, the dredging of the lakes is practically impossible, implying very costly, inefficient dredging work, with a high consumption of energy, under the conditions of the continuation of such transportation of alluvium;

The pollution of whole portions of rivers is creating difficult situations for the water supplies of some zones and localities. Consequently, in the next period it is particularly necessary to achieve purification plants for industrial units and localities that have become dangerous sources of pollution.

It must be said that, from this viewpoint, even our legislation is not strict enough, with the law on water providing penalties only for those who do not ensure the proper operation of the existing purification plants, but not also for the units that are not equipped with purification plants and discharge completely unpurified waste water;

It is necessary to generalize the introduction of the water-consumption quotes and to promote measures for reducing the specific consumptions, through the utilization of technologies that imply lower water consumptions, through the achievement of water recycling and through measures aimed at doing away with waste of water, in pipelines and installations, due to defective or poor-quality fittings (valves, faucets and so on). Along with the administrative, technical and organizational measures, in order to promote an economical spirit in water utilization and do away with waste, it is also necessary to improve the economic and financial factors, applying the principles of the new economic and financial mechanism. In comparison with other developed states, both socialist and nonsocialist ones, these factors are very moderate in our country, with a limited and unstimulative effect on water economization. Special attention must be devoted to the sensible management of potable water--the most costly water--which, in our country, is consumed in big quantities in the industrial units, not always in a justifiable manner.

The irrigation systems have become a big water consumer. In them, big water losses are being registered, both in the water-distribution canals and through the watering technology, over long periods, with high water quotes that exceed the retentive capacity of the plants, with the biggest quantity of the water transported being lost in the ground, with the negative effects that result from raising the water table. This phenomenon requires a thorough study in order to find solutions for improving the irrigation techniques, with a reduction of the water consumptions, an increase in the efficiency of the irrigation for plants and a reduction of the negative effects on the soil and the ground-water layer.

One particular problem is the pollution of underground water, both through the penetration into the soil of dejecta from livestock complexes and of residues of polluting substances from industrial platforms, from pipelines for petroleum products and from the pits of oilfields and mines and through the penetration into the water table of the nondegradeable chemical substances (fertiliser and pesticide) used by agriculture. In this regard, the only efficient measures are preventive ones: the decisive elimination of the sources of pollution of underground strata of water.

Of course, all the problems cannot be exhausted in one article. I intended to outline just some of the most important ones. In closing, I would like to point out that the problems of water economization and management are nonetheless becoming problems of great national interest, in the solving of which all the factors involved must cooperate--both the managers of water and its users, practically all the citizens of the country, interested in providing quantitatively and qualitatively, at present and in the future, the necessary sources of water, both for the development of economic activities and for the comfort and health of the human community.

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DEVELOPMENT OF HYDROELECTRIC FACILITIES EXAMINED

Bucharest REVISTA ECONOMICA in Romanian No 23, 5 Jun 81 pp 17-18

Article by Engr P. Antoci and Engr I. Kavtar of the Hydroelectric Power Studies and Design Institute: "Hydroelectric Power Production--Priorities and Prospects"

Text The electric-power equivalent of the whole volume of water coming from the average rainfall on our country's territory (which varies between 400 mm and 1,600 mm per year, depending on altitude) has a theoretical value of about 230 billion kilowatt-hours per year. Due to the water losses through infiltration and evapo-transpiration, this potential falls to 90 billion kilowatt-hours per year, distributed over about 100,000 km, which is what the country's whole hydrographic network measures. However, the concentration of the potential occurs only on the courses of the rivers, which total about 5,000 km (4,000 km on inland rivers and 1,000 km on the Danube). The taking into consideration of the limits imposed by the geomorphological conditions of the land, the yield, and the degree of regularization of the flows thus leads to the reduction of the potential to 38 billion kilowatt-hours per year.

The studies made up to now show that this potential can be harnessed under the present technical conditions, through the achievement of 600-700 hydroelectric power stations HPS's with powers above 1 megawatt, with a total power of about 13,600 megawatts being obtained.

Through the achievement of power stations with low outputs and of microhydroelectric power stations (MHPS's) on rivers of local interest, in addition to the existing hydrotechnical facilities or those that are executed for water management, an installed power of about 800 megawatts and a power production of about 2 billion kilowatt-hours per year can also be obtained in several thousand MHPS's.

Lastly, the hydropower potential of the Socialist Republic of Romania is figured at 40 billion kilowatt-hours per year, of which 28 billion kilowatt-hours come from inland rivers and 12 billion kilowatt-hours per year from the Romanian part of the Danube's potential.

From the data furnished by the UN Economic Commission in 1980 for some countries in Europe, it results that our country, with 0.168 million kilowatt-hours per square meter, is at the average of the specific technically harnessable potential of these countries.

In the 1951-1980 period, 50 HPS's were put into operation, mostly of the peak-load kind, with an installed power of 3,500 megawatts at the level of 1980 and a power production of 12,500 gigawatt-hours per year, coming to a specific cost of about 8,000 lei per installed kilowatt. At the level of 1980, a 28-percent degree of utilization of the hydropower potential was achieved.

It is possible to mention the fact that the Bistrita, Somes, Sebes, Cerna, Motru, Olt, Lotru and Arges Rivers are harnessed for the most part. The facilities achieved are remarkable in their conception, hydrotechnical solutions and high economic efficiency. One should note the large number of dams and the diversity of types (gravity, arch, rounded buttress and so on), of materials used (concrete, rubblestone, ballast and so on) and of heights (up to 167 meters), a diversity that reflects the very different geomorphological conditions in which these facilities have been placed.

The world rate of growth of electric-power production can be considered relatively low, it being 150 percent in the year 2000 in comparison with the level in 1979, with the accent being put on reducing the consumption by improving the technologies.

Here in our country, the rate of growth of electric-power production is higher than the world rate, with the current provisions mentioning the attainment of the 150-percent growth before the year 2000 at the level of the whole branch of electric-power production and with the growth being achieved in the hydroelectric power stations around 1985.

At the same time, the fact should be noted that the petroleum and fuel crisis has led to the accentuation of the trend toward utilizing all watercourses, even those that were considered uneconomical at one time.

In our country, on the basis of the preliminary studies, the degree of utilization at different stages leads to the necessity of attaining the levels in the table.

Table

<u>Period</u>	<u>Degree of utilization of potential</u>	<u>HPS's (number)</u>	<u>Newly installed power (megawatts)</u>	<u>Electric power production (billions of kilowatt-hours per year)</u>	<u>Storage (millions of cubic meters)</u>
1981-1985	45 percent	50	2,000 + 2,600	6-7	2,000
1991-2000	100 percent	400	4,000 + 5,000	14-16	17,000
1986-1990	65 percent	70	3,000 + 3,500	7-8	4,000

In order to utilize waterfalls of local interest, a big increase in the construction of microhydroelectric power stations is prescribed. As has been mentioned, 800 megawatts and approximately 2 billion kilowatt-hours per year can be obtained through the achievement of about 10,000 MHPS's. Their construction is to be done mainly on a local level, on the basis of the model designs and the 12 prototype dimensions of microturbines that are to be produced by our industry.

Hydroelectric power stations with storage by pumping (CHMAP) constitute a new field in the country's hydropower facilities. Through their functionality, these power stations are meant to take over the daily or weekly variable part of the

electric-power consumption, using the energy from the hours of minimum load to produce suitable power in the hours of maximum load.

The construction of these power stations is necessitated, on the one hand, by the expansion of the development of the installed powers in thermoelectric power stations using low-grade coal and by the appearance of nuclear electric power stations, with limited possibilities of operating at a variable load, and, on the other hand, by the gradual depletion of the possibilities of achieving gravitational hydroelectric power stations with a peak-load specific character.

The studies made have pointed out as possible about 40 sites in the mountain zone of the country, on the plateau of Dobruja and in the Iron Gates zone. Additional facilities are also possible at some existing hydroelectric power stations like Sebes, Lotru and so on.

On the other hand, the fact is characteristic that zones of rivers with less potential and with less favorable geomorphological conditions, with implications in the zone or regarding the road or railroad lines of communication, remain to be harnessed in the future.

Another characteristic of the facilities in prospect is the continual reduction of the mean unit power per hydroelectric generating set, from 30 megawatts in 1981-1985 to 17 megawatts in 1986-1990, finally reaching 6 megawatts after 1990, which will lead to the growth of the index of volumes of building-assembly work and equipment per unit of capacity and product.

However, hydroelectric power stations have the great advantage that they do not consume any kind of fuel and that they benefit from the annual restoration of the "source" for electric-power production, and the hydrotechnical facilities, which provide technologically for the process of electric-power production, have a service life that goes up to 100 years.

One of the important problems that are constantly confronting the staffs of designers is the optimum size of the installed power of the HPS's, that is, the number of hours of operation of the hydroelectric power stations for running them at the peak load or on the basis of the load timetable.

In 1980, our country achieved, on the average, 3,600 hours of operation of the installed power in the HPS's, as compared with the average of about 3,100 hours in 10 European countries.

In order to have a more complete picture of the tasks in this field, it is also important to note the fact that the service life of the HPS's offers an expectation of their functioning for at least 40-50 years in the power-production system.

From an analysis of the evolution of the unit power of the sets installed in the hydroelectric power stations in the Socialist Republic of Romania in the 1950-1980 period it results that while there was talk in 1953-1955 about unit powers below 10 megawatts for the sets in the HPS's, these powers rose to 55 megawatts in the 1962-1966 period and to 170-175 megawatts in the 1970-1972 period.

In the design of HPS's with regard to the unit power of the sets for the conditions specific to our hydroelectric power stations, Romania has reached the world level.

Finally, one should note the fact that while the electromechanical and hydromechanical equipment needed for our hydropower facilities was completely imported in the past, the equipment is almost completely manufactured in our country at present, with us even succeeding in becoming exporters of electromechanical equipment.

12105

CSO: 2700/293

POOR ECONOMIC RESULTS IN MONTENEGRO

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 15 Jun 81 p 32

[Text] If one is to judge by the Montenegrin economy's performance in the first 4 months of this year, it is not very likely that the tasks and proportions in socioeconomic development called for by the plan will be achieved in this republic.

Industrial output showed a growth rate of 5.2 percent, which is slightly below the rate planned for 1981. This relatively satisfactory rate is the result of production of new production capacities for coal, ferrous and nonferrous metallurgy, metal manufacturing, the textile industry and the leather and footwear industry, while eight industries recorded output below the planned rate, and the electric power industry showed a drop of all of 15.5 percent.

Industries which had a growth rate of output close to the planned rate for the first 4 months of the year showed an average drop of 8-10 percent between March and April (ferrous metallurgy 8.4 percent, metallurgy and metal manufacturing 5 percent, machinebuilding over 50 percent, the textile industry 20 percent, and so on). This kind of arrhythmia in production resulted from difficulties in the supply of raw materials, intermediate products and spare parts, which was particularly pronounced for the Boris Kidric Steel Mill, the Radoje Dakic Construction Machines Industry, the textile industry and the electrical products industry, from the product mix of inventories, and from the high dependence on imports.

Adverse tendencies were also pronounced in the sector of foreign economic relations. Over this period Montenegro exported goods worth 1,348 million dinars, or 28 percent more than in the corresponding period of last year. Over that same time imports were valued at 3,497 million dinars, or 33 percent more than over the same period of last year. The growth rate for both exports and imports was higher than in the other republics and provinces, but the regional pattern of imports and exports was considerably less favorable than the results achieved for the entire country. Exports to the convertible area were down 8 percent, while imports were up all of 39 percent (70 percent for the entire country). The total visible foreign trade deficit was up 36 percent, and with the convertible area it was up all of 57 percent. The coverage of imports by exports was at the lowest level in the country and did not even reach 19 percent in trade with the convertible area.

Prices were certainly another of the destabilizing factors. In a comparison of this April with April of last year prices of industrial products were up 48.7 percent, retail prices 50.4 percent, and the cost of living 44 percent. A rise of prices was recorded at the very beginning of the year, and there was a certain settling down in March and April.

Conditions for economic activity and economic trends brought about a growth of losses in the first 3 months of about 56 percent (770 million dinars) over the same period of last year. The organizations of associated labor incurring the losses were mostly those with a seasonal pattern of activity (timber and lumber 19.8 million, construction 82 million, tourism and hostelry 99.2 million, and so on).

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CSO: 2800/281

DATA ON NUMBERS OF WORKERS, FAMILIES ABROAD

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 8 Jun 81 p 31

[Text] According to provisional figures (only notices received before 15 April have been processed, and the period was extended to the end of June), there are 577,648 Yugoslav citizens employed temporarily abroad, which is 14 percent fewer than at the time of the previous census, in 1971. When family members are included, however, there has been an increase in the number of Yugoslavs abroad from 763,776 in 1971 to 814,894. The number of members of families of Yugoslavs employed abroad temporarily has increased all of 158 percent (237,246 as against 91,818 10 years ago). This shows that the time our workers are spending abroad is increasing and that a considerable percentage of them will not return (at least not during their working lives) when one takes into account the families that have gone with them.

Serbia proper is the region accounting for the largest portion of economically motivated emigres (139,157), and Serbia proper has also recorded the highest increase in the number of workers employed abroad temporarily (21 percent). There was growth compared to the 1971 Census in Montenegro (18 percent), Kosovo (9 percent) and Macedonia (5 percent), while in the other republics and Vojvodina there was a reduction. In Croatia the reduction amounted to all of 40 percent, so that this republic is no longer a principal region of emigration (Serbia proper, which in 1971 was third in terms of the absolute number of workers abroad, is now first). In view of the tendency toward gradual assimilation of our workers, we should expect that this time a certain number of workers have not sent in notices, by contrast with the 1971 Census.

All the republics and provinces show a high rate of growth of the number of family members who have joined workers employed abroad temporarily. This rate ranges from 65 percent in Vojvodina and 77 percent in Croatia to 403 percent in Bosnia-Hercegovina and even 735 percent in Kosovo. The ratio between the number of workers to the number of family members ranges from nearly 1 to 1 for workers from Montenegro to 3.5 to 1 for workers from Slovenia.

In view of the considerable extension of the reporting period for workers employed abroad temporarily, the final figures will show a somewhat larger volume of economically motivated emigration in all categories.

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July 30, 1981

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